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**“Challenge and Be Challenged”: A  
History of Social Research Capacity  
and Influence in DEFRA and DECC,  
2001-2015**

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**PhD**

**Science and Technology Studies**

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# **“Challenge and Be Challenged”<sup>1</sup>: A History of Social Research Capacity and Influence in DEFRA and DECC, 2001-2015**

**“Knowledge only means complicity in guilt; ignorance has a certain dignity”**

*- The words of Sir Humphrey Appleby, the Permanent Secretary of the Department of Administrative Affairs, in the BBC sitcom ‘Yes Minister’ (‘Open Government’, 1980)*

<sup>1</sup> I first heard the phrase ‘challenge and be challenged’ at a DECC Stakeholder Event with academic social scientists in 2012 and was intrigued to inquire of its origins. Not only was this a phrase included in the job description for a seconded academic social science research fellow in DECC (as we will see in Chapter 5), but, I argue here, it also captures the lived experience of social researchers within DEFRA and DECC between 2001 and 2015. And this has implications for our theoretical understanding of the civil service in STS and related fields. I invite you to read on to see why.



## Declaration

I, Michael Kattirtzi, declare that this work has been composed by me and is an original report of the research I conducted. No part of this thesis has been submitted for any other degree or professional qualification.

Parts of Chapter 7 have been published in the article below:

Kattirtzi M (2016) Providing a 'Challenge Function': Government Social Researchers in the UK's Department of Energy and Climate Change (2010-2015). *Palgrave Communications* 2: 16064.



# Abstract

Government social researchers are a group of civil servants who have been overlooked in the existing literature on policy-making in the UK. Their role is particularly intriguing in policy areas relating to environment, food, and energy policy. In these domains, researchers in Science and Technology Studies have argued that policy-makers hold flawed assumptions about citizens' views and likely actions, contributing to an image of UK policy institutions as overly technocratic and resistant to change. In this context, this thesis aims to understand changes in social research capacity and influence in the Department for Environment, Food and Rural Affairs (DEFRA) and the Department of Energy and Climate Change (DECC) between 2001 and 2015. Based on an analysis of more than 200 documents and 46 interviews with civil servants and external researchers, this thesis illuminates the growth of social research capacity and influence within DEFRA and DECC, since these departments were formed in 2001 and 2008 respectively.

The first two empirical chapters (4 & 5) explain how social research capacity expanded within specific institutional, political, and epistemic contexts, through changes in how actors perceived the meanings, roles, and value of social research. It is shown that, contrary to what has been implied by recent literature, DEFRA and DECC are epistemically diverse and dynamic: they house multiple and conflicting epistemic perspectives which are reshaped over time. Moreover, social researchers are committed to performing a 'challenge function', whereby they question assumptions, values, and the framing of ideas. Indeed, such challenging has been important in shaping the capacity for social research within these departments.

Social researchers' 'challenge function' has also contributed to their gaining greater influence in DEFRA and DECC. Considering policy areas from each department in depth, Chapters 6 & 7 show that social researchers have enabled both 'single-loop' and 'double-loop' learning. As a result, in both departments social researchers have had some success in encouraging their colleagues to develop and test out policy ideas with the help of empirical research about citizens' perspectives and everyday lives.

While social researchers' 'challenge function' is a significant policy learning mechanism, it has also been inhibited in various ways within these departments. The thesis concludes that their challenge function could be strengthened if social researchers gain greater representation in the senior civil service and more institutional recognition of their expert *knowledge* relating to a policy area (besides their *skills*). Moreover, better interdisciplinary collaboration is needed early on in policy development processes. Such changes have the potential to improve both the effectiveness and democratic legitimacy of policy-making within DEFRA and DECC.



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Meeting Androulla Harris in the closing stages of this thesis is not easily explained without recourse to the notion of a miracle. Her assistance and affection have made the final few months far more enjoyable than they would have been otherwise. And as I close this chapter, I look forward to what the next will bring.



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## List of Abbreviations

ABRP	Action-based research project
BERR	Department for Business, Enterprise and Regulatory Reform
BIS	Department for Business, Innovation and Skills
BIT	Behavioural Insights Team
BSE	Bovine Spongiform Encephalopathy
CEIB	Centre of Expertise on Influencing Behaviour
CIT	Customer Insight Team
COI	Central Office of Information
DBEIS	Department for Business, Energy and Industrial Strategy
DECC	Department of Energy and Climate Change
DEFRA	Department for Environment, Food and Rural Affairs
DETR	Department of the Environment, Transport and the Regions
DTI	Department of Trade and Industry
DSO	Departmental strategic objectives
E&IS	<i>Evidence and Innovation Strategy</i> report
ELP	Early learning project
EFE	Environment, food, and energy
ESRC	Economic and Social Research Council
FMD	Foot-and-mouth disease
GCN	Government Communications Network
GSR	Government Social Research Service
HCI	Head of Customer Insight
HPE	Head of Policy Evaluation
IHD	In-home display
MAFF	Ministry of Agriculture, Fisheries and Food
NAO	National Audit Office

NGO	Non-governmental organisation
OFGEM	Office of Gas and Electricity Markets
PET	Policy Evaluation Team
RCT	Randomised controlled trial
SAC	Science Advisory Council (DEFRA's body of science advisors)
SAG	Science Advisory Group (DECC's body of science advisors)
SBU	Sustainable Behaviours Unit
SCP	Sustainable consumption and production
SDC	Sustainable Development Commission
SME	Small and medium-sized enterprises
SMIP	Smart Meters Implementation Programme team
SSEP	(DEFRA-DECC) Social Science Expert Panel
SSRC	Social Science Research Council
STS	Science and Technology Studies
WRAP	Waste & Resources Action Programme (a UK charity)



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# Chapter 1

## Introduction: Missing Masses and the Multiple Meanings of Social Research in the Context of Environment, Food, and Energy Policy

### 1. Finding a Focus

**O**VER THE PAST FIFTY YEARS, researchers in Science and Technology Studies (STS) and related fields have shown how the construction and application of technical expertise in society can be subjected to sociological, historical, and philosophical examination. From theories of gravity waves<sup>1</sup> to bog quality,<sup>2</sup> and from bicycles<sup>3</sup> to financial models,<sup>4</sup> the development and application of knowledge and artefacts are shown to shape – and be shaped by – their social and material context. No longer can it be said that the social dimensions of expertise constitute the ‘missing masses’<sup>5</sup> in

<sup>1</sup> Collins, 1992.

<sup>2</sup> Yearley, 1989.

<sup>3</sup> Pinch and Bijker, 1984.

<sup>4</sup> MacKenzie and Spears, 2014.

<sup>5</sup> Yearley, 2005, p.vii; Latour, 1992.



the sociology, history, and philosophy of science, technology, and related policy-making processes.

This is clearly the case with matters relating to environment, food, and energy policy, with which this doctoral thesis is concerned. In recent years in the United Kingdom, researchers in STS and related fields have fruitfully examined a wide range of ‘controversies’ – either between citizens and experts (for example, relating to renewable technologies, genetically modified foods, and bovine spongiform encephalopathy)<sup>6</sup> – or between different experts (for instance, climate science, nuclear power, pesticides).<sup>7</sup> These accounts typically brought to light the (often unacknowledged) uncertainties and assumptions embedded within experts’ judgement. They also highlighted the importance of context for understanding the epistemic content of disputes and their resolution. Such studies thereby emphasised the ‘hybrid’<sup>8</sup> sociotechnical nature of the evidence on which government decisions are said to be based.

But while this sociotechnical perspective has gained traction in academic circles, many STS analysts object that the UK Government continues to frame environment, food, and energy policy problems as if their social dimensions are immaterial to the policy-makers’ concerns.<sup>9</sup> This has given rise to charges that the policy-makers responsible for these policy areas operate in overly ‘technocratic’ and ‘scientistic’ ways.<sup>10</sup> For this, politicians, civil servants, and stakeholders have been accused of lacking democratic legitimacy or ‘social

<sup>6</sup> Burningham et al., 2014; Doubleday and Wynne, 2011; Van Zwanenberg and Millstone, 2003.

<sup>7</sup> Hulme, 2009; Johnstone and Stirling, 2015; Irwin, 2013.

<sup>8</sup> Irwin, 2013, p.113.

<sup>9</sup> Irwin, 2013, p.126; Wyatt, 2008.

<sup>10</sup> Kearnes et al., 2006, p.229; Wynne, 2006.

robustness’.<sup>11</sup> In sum, UK policy institutions engaged with these domains seem destined to overlook what might be termed the ‘missing masses’ of science policy – that is, citizens and communities, as understood within their epistemic, political, and material context.

Where social scientists do try to account for policy-makers’ lack of attention to citizens’ diverse perspectives and concerns with regards to science and technology, the proffered explanations include: the prevalence of shared assumptions and commitments that go unchallenged and unacknowledged within government organisations;<sup>12</sup> the predominance of ‘instrumental rationales’ amongst policy-makers, which are said to focus efforts on delivering agreed outcomes and limit scope for reflection;<sup>13</sup> and the related claim that “reflexivity is not a natural or easy condition within policy institutions”.<sup>14</sup> Given other social scientists’ claims that “criticism is a problem”<sup>15</sup> for civil servants, a rather pessimistic picture emerges of British policy-makers’ abilities to govern with regards to environment, food, and energy policy areas.

What, then, is the focus of this PhD study? This thesis was inspired by a passing observation. In a world where many STS analysts argue that the UK Government is failing to acknowledge the importance of understanding these missing masses in environment, food, and energy policy, I aim to make sense of an unexpected observation in the government departments responsible for these policy areas. In spring 2013, I spotted a link on the archived website of the Department for Environment, Food and Rural Affairs

<sup>11</sup> Wynne, 2014; Nowotny, 2003.

<sup>12</sup> Rip, 2006, pp.357-358; Irwin, 2013, p.126.

<sup>13</sup> Chilvers and Macnaghten, 2011, p.539; Pallett and Chilves, 2013; Wynne, 1993.

<sup>14</sup> Burchell, 2009, p.57.

<sup>15</sup> LSE Group GV314, 2014; citing Norris, 1995.

(DEFRA), dating back to 2007.<sup>16</sup> It was labelled ‘social research’. Clicking on this link revealed that there were at the time ‘government social researchers’ within DEFRA – and that they worked on encouraging pro-environmental behaviour amongst the public. I later also found out that DEFRA has had social researchers working on diverse aspects of its remit since 2004, that the Department of Energy and Climate Change (DECC) – which was formed in 2008 – only began to employ social researchers in 2010, and that at the time that I conducted my interviews (late 2013 to summer 2014), DEFRA and DECC each employed approximately 20 social researchers. I was full of questions: who are these social researchers? What do they do? How did they get there?

Akin to the seemingly improbable electron diffraction effects observed in the famous double-slit interference experiment,<sup>17</sup> finding that there are ‘government social researchers’ situated within the walls of DEFRA and DECC seemed to me to pose a problem for recent depictions of these departments in the STS literature. What did these observations *mean*? Perhaps these actors embody the British Government’s recognition that the social sciences have something important to say about technical policy topics? If so, then the problem is no longer one of ‘missing masses’, but of empirical observations that are inconsistent with the STS literature.

After finding no mention of these actors in any STS publications (and indeed limited recent discussion of the role of government social researchers

<sup>16</sup> DEFRA [National Archives], 2012.

<sup>17</sup> The standard interpretation of the double-slit interference experiment in physics is as follows. Tens of thousands of electrons are fired at two slits separated at a fixed distance. On the other side of the slits is a detection screen. We would expect the pattern of electrons detected on the screen to appear random, but instead the pattern resembles the crests of water waves undergoing interference as they pass through two gaps in a barrier. This surprise finding is interpreted to mean that under some conditions electrons behave like waves and not as particles (Halliday et al., 2005, p.1068).

in academia in general)<sup>18</sup> I set out to understand DEFRA and DECC's communities of social researchers. The next two sections considers in greater depth how 'social research' might be interpreted in the context of these departments - from an STS perspective, and then more broadly.

## **2. Research and Reflexivity**

It was argued in the previous section that the presence of social researchers in DEFRA and DECC is particularly intriguing in the light of existing STS literature on the the contributions of other sorts of expertise within the domains of environment, food, and energy policy. This section elaborates on this by providing a background to the relevant issues in the STS literature.

Since at least the 1990s, STS researchers have challenged the dominance of 'technocratic' framings of policy problems in regard to environment, food, and energy policy in the UK. In mid-1990s a predecessor department to DEFRA, the Ministry of Agriculture, Fisheries and Food (MAFF), was engulfed in scientific controversies concerning their management of two epidemic diseases: bovine spongiform encephalopathy (BSE) and foot-and-mouth disease (FMD). Analysing the BSE crisis, Sheila Jasanoff observes that MAFF was accused of letting down the public, after ministers had assured citizens that British beef was safe to eat.<sup>19</sup> The ministry was deemed overly concerned with protecting farmers' interests and was let down by the reassuring advice of scientists, veterinary experts, and the medical

<sup>18</sup> There is one notable exception to this. Nutley et al. observe that at the time of writing the number of government social researchers had doubled since 1997, a Government Social Researcher had been appointed and anecdotal evidence suggested that their expertise was more valued than previously (2007, p.247).

<sup>19</sup> Jasanoff, 1997, p.222.

*“Challenge and Be Challenged”*

professions. MAFF was therefore accused of not sufficiently prioritising the concerns of members of the public when these conflicted with the advice or interests of the farmers, scientists, veterinarians, and health practitioners with whom they engaged. Jasanoff concludes from her analysis that the ministry should engage earlier and more honestly with citizens’ concerns, and allow their stakeholder groups to face open investigation by members of the public.<sup>20</sup> But the resulting loss of public confidence in the institution eventually led to its downfall.<sup>21</sup>

While MAFF was abolished in 2001, STS analysts continued to direct similar criticisms towards its successor, DEFRA, and towards related institutions (including DECC) regarding what they saw as the over-extension of technical experts’ influence over the framing of EFE policy problems. Across diverse policy issues including the regulation of pesticides,<sup>22</sup> the framing of policy problems such as climate change,<sup>23</sup> the understanding and management of risks associated with chemicals and emerging technologies<sup>24</sup>, and the appraisal of options for energy generation capacity,<sup>25</sup> STS analysts have argued that citizens’ concerns have been consistently treated as secondary to experts or industry stakeholders’ priorities (when considered at all). This has given rise to what Brian Wynne has termed the ‘deficit model’, according to which policy-makers and scientists attribute citizens’ concerns to a deficit of knowledge, trust, or some other property which can be easily remedied without changing policy-makers’ priorities or courses of action.<sup>26</sup>

<sup>20</sup> Jasanoff, 1997, p.230.

<sup>21</sup> Taylor, 2003; Wilkinson, 2011.

<sup>22</sup> Irwin, 2013, p.124.

<sup>23</sup> Pallett and Chilvers, 2013.

<sup>24</sup> Kearnes et al., 2006.

<sup>25</sup> Stirling, 2008, p.272.

<sup>26</sup> Wynne, 2006.

In the above cited examples, researchers have argued that policy actors ought to appreciate that contrary to 'deficit model' discourses, members of the public often have genuine concerns, relevant knowledge, and/or ascribe to alternative problem-framings. If these are taken seriously by policy actors, the argument follows, we would have more open policy debates and government's consideration of approaches would be more 'congruent'<sup>27</sup> with public sentiment, values, understandings, and framings. Hence, rather than asking how technologies or scientific framings of problems could be accepted by citizens or attempting to motivate them to change what they do, these STS researchers suggest that policy actors should rather seek to construct 'socially robust' policies that are more firmly rooted in citizens' understandings of the world. This, argues Wynne, would require science and policy institutions (such as DEFRA and DECC) to become more 'institutionally reflexive'.<sup>28</sup> That is to say, actors within those organisations should be more critical of their own assumptions and understandings of science, citizens, and the relationships they have with citizens and other actors.

As is extensively discussed in the literature, Tony Blair's Labour Government responded to these criticisms by involving citizens in policy-making through public engagement processes, often with STS researchers involved.<sup>29</sup> Yet, while those processes have been closely scrutinised in the literature, the same Government undertook major reforms in how the civil service uses scientific advice - under the heading of a 'Modernising

<sup>27</sup> Stirling, 2008, p.272.

<sup>28</sup> Wynne, 1993.

<sup>29</sup> Thorpe, 2010; Lock, 2008.

Government’ agenda.<sup>30</sup> The latter reforms have been overlooked in STS. And yet there is some evidence to show they may have been substantial: Sandra Nutley and colleagues have claimed that between 1997 and 2007 the Government doubled its number of social researchers, established new capacity in departments where there was previously none, and also created the post of Chief Government Social Researcher to provide dedicated leadership to the analysts.<sup>31</sup>

Bringing these observations together when I began this project, it seemed reasonable to hypothesise that DEFRA and DECC’s social research community might well have been established and sustained in order to address what I described above as the missing masses in science policy. But this was to presume too much. ‘Social research’ is a broad church, and there are many other forms it could take beyond the examination and improvement of processes of scientific advice-making that are of relevance to these departments. As such, it is an empirical question to see which forms of expertise are recognised and which are not in specific departments. The next section identifies a handful of the forms of social research that are relevant for this thesis.

### **3. Multiple Meanings of Social Research**

A document published by the Cabinet Office in 2011 defines ‘social research’ as follows:

<sup>30</sup> Cabinet Office, 2000.

<sup>31</sup> Nutley et al., 2007, p.246.

Understanding the potential and actual social impacts of policy decisions/practice, including understanding public perceptions and the opportunities for behaviour change. Advising across government on research methodologies and ethics.<sup>32</sup>

While this definition may seem straightforward, it is notable that ‘behaviour change’ is a relatively recent term in policy discourse, and one whose rise in significance in the minds of policy-makers has been supported by the changes which I discuss in this thesis. Clearly then, government actors’ interpretations of social research can be said to be historically contingent, and merit further elaboration. Furthermore, despite broad ‘top-down’ definitions articulated by the Cabinet Office, in practice the meanings that come to be associated with ‘social research’ within a government department are fluid and shaped by the institutional, epistemic, and political influences acting within it.<sup>33</sup>

We can identify a range of forms of social research which actors may view as constituting (either in combination or as a whole) what it means to do social research in government. The forms of research identified below are not to be read as exhaustive nor mutually exclusive – the same project may combine different types of research. Rather, they are intended to introduce the reader to the range of ideas that are found to be associated with social research within government, and which will be referred to throughout this study.<sup>34</sup>

<sup>32</sup> Analytical Coordination Working Group, 2011, p.2.

<sup>33</sup> Walker, 1987.

<sup>34</sup> After developing this categorisation I found that Martin Bulmer produced a similar but more generic typology of forms of social research in government (1980, pp.5-6). The categories distinctions presented here are preferred because they are tailored to the forms of social research that we will encounter throughout the thesis.



### ***Studies of public attitudes and perceptions***

The first type of social research that we can expect to find in the civil service is concerned with understanding citizens’ views. This can involve qualitative or quantitative research, and could be used as a basis from which to develop policy ideas or to set expectations about citizens’ likely reaction to a new policy idea. Depending on how a research study is designed, it might reveal differences in framings, understandings, or values between citizens and expert advisors, but it could just as easily be designed to assume a deficit model. Examples of such studies include regular surveys to monitor public attitudes (which might also be managed by statisticians),<sup>35</sup> qualitative analysis of particular groups of citizens’ views,<sup>36</sup> and investigations into the reasons why a specific issue has gained salience for citizens at a particular time (for instance, using the social amplifications of risk theoretical framework).<sup>37</sup>

### ***Understanding what people do***

A second form of social research is the analysis of what people do within the context of their everyday lives. Such research might be framed in terms of understanding individuals’ behaviours through a psychological and/or economic lens, with the aim of making sense of the choices that individuals make and how these vary under different circumstances. One key text for our purposes is the book *Nudge*,<sup>38</sup> which provides readers with examples of cheap and effective changes that have been used to influence the actions of individuals in a setting where they can make choices. As an example, the

<sup>35</sup> E.g. Ipsos Mori, 2013; 2014.

<sup>36</sup> E.g. Brook Lyndhurst, 2007.

<sup>37</sup> Kasperson et al., 1998.

<sup>38</sup> Thaler and Sunstein, 2008.

authors present the case of a utility company in the USA, who reported a reduction in domestic consumers' energy use at peak times of around 40% within weeks of an intervention.<sup>39</sup> The intervention involved sending customers an 'Ambient Orb' which glowed orange during times of high energy use. The authors argue that the scheme was a success because it makes energy visible to customers, and because the orb grabs attention and motivates action. With tips like these, the book inspired David Cameron to set up the Behavioural Insights Team (which was soon coined the 'Nudge Unit') when he entered office in 2010.<sup>40</sup> The book also inspired the Cabinet Office's MINDSPACE report, which provides further examples and guidance on how policy-makers can apply nudge-style approaches.<sup>41</sup>

Another approach is to focus not on the choice but on the *practice*. Proponents of practice theory argue that specific practices (such as ways of cooking or commuting) are sustained by the dynamic interactions between three elements that underpin a given activity: 'meanings', 'materials' and 'competencies'.<sup>42</sup> On this view, practices are sustained in society because they are imbued with meaning for citizens, are supported through 'material' technologies or tools such as objects, infrastructures, and rules and regulations, and are enabled through particular competencies such as access to skills and other resources. So, for example, the rise of domestic recycling practices in Scotland can be explained in terms of the interactions between material changes (such as the roll-out of kerbside recycling boxes),<sup>43</sup>

<sup>39</sup> Thaler and Sunstein, 2008, p.194.

<sup>40</sup> BBC News, 2010a.

<sup>41</sup> Dolan et al., 2010.

<sup>42</sup> Shove, Pantzar, & Watson, 2012, p.22.

<sup>43</sup> Stewart, 2011, p.141.

particular competencies (e.g. ease of access)<sup>44</sup> and specific meanings (i.e. the notion of ‘doing my bit’, and what this signals to neighbours)<sup>45</sup>. Practice theorists use examples like these to argue that policy-makers should take a more holistic approach to understanding how to make everyday activities more sustainable, rather than fixating narrowly on a material change or individual incentive. It is, they argue, the combinations of elements (which change and shape each other over time), that determine when and how a practice will emerge, survive, or be superseded.<sup>46</sup>

### *Learning about sociotechnical transitions*

A third form of social research that is relevant for DEFRA and DECC’s remits can be characterised as sociotechnical transitions theory.<sup>47</sup> An important insight in this research, which draws upon STS, policy studies, management studies, and other fields, is that successful transitions towards sustainable societies rely not only upon new technologies, but also upon new linkages between networks of actors, markets, meanings, governance structures, and users.<sup>48</sup> It is for this reason that the transitions are termed ‘sociotechnical’.<sup>49</sup> Researchers in this field aim to develop a framework for understanding – and supporting – long-term transitions towards sustainability.<sup>50</sup> The Multi-Level Perspective<sup>51</sup> is particularly useful in this regard, in that it focuses the analyst’s attention on three levels of change (the niche, regime, and landscape levels), and how these shape each other. At the

<sup>44</sup> Stewart, 2011, p.141.

<sup>45</sup> Stewart, 2011, p.149.

<sup>46</sup> Shove, Pantzar, & Watson, 2012, p.25.

<sup>47</sup> Geels, 2004.

<sup>48</sup> Geels, 2010, p.495.

<sup>49</sup> Kern & Smith, 2008, p.4094.

<sup>50</sup> Kern & Smith, 2008, p.4093.

<sup>51</sup> Geels, 2004.

niche level are novel technological innovations and energy practices, which emerge and start to challenge incumbent actors.<sup>52</sup> Above this level is the regime, which refers to a relatively stabilised alignment of regulatory structures, stakeholders' interests, technological configurations, research priorities, and cultural meanings.<sup>53</sup> Then, interacting with changes in the niche and regime levels, are political, social, or material changes at the landscape level, which are beyond the control of actors operating at the regime or niche levels.<sup>54</sup>

Surprisingly, sociotechnical transitions theory did not feature prominently as a form of social research in the data generated as part of this study. It may be that the relevant academic social scientists engage directly with government scientists or economists rather than the social researchers which this PhD focuses on, or they may have achieved an 'enlightenment' model of influence (defined in Chapter 3, Section 7 below) which was not observed here.

### *Assessing the potential impacts of different policy options*

Social research in government can also mean conducting (or commissioning) empirical studies or literature reviews to understand the possible impacts that a range of policy options may have, and to inform policy-makers' selection. This can involve the analysis of the social and distributional impacts of present or past policies, pilot studies (including randomised controlled trials and action-based research projects) to test

<sup>52</sup> Geels, 2004, p.912.

<sup>53</sup> Geels, 2004, pp.905-906.

<sup>54</sup> Geels, 2004, p.913.

between options, and/or the use of theoretical frameworks<sup>55</sup> to explore the effects of a given policy.

### ***Policy evaluation studies***

Alongside policy appraisal sits policy evaluation, which is concerned with learning lessons from past policies. This may take the form of process evaluations, which seek to understand how a given policy was developed and delivered, or outcome evaluations, which are concerned with the intended and unintended consequences of policies. The central Government Social Research Unit, (situated in the Cabinet Office) provides guidance for conducting policy evaluation using social research methods in the *Magenta Book*.<sup>56</sup> But policy evaluation may also be conducted using economic methodologies, and guidance for this is provided by the leadership of the Government Economics Service (who are also based in the Cabinet Office), in the *Green Book*.<sup>57</sup>

Clearly then, there are multiple possible meanings associated with social research and so it is wrong to presuppose *a priori* that the rise of social researchers in DEFRA and DECC has anything to do with STS arguments concerning the social dimensions of science and technology policy. Following the lesson of meaning finitism,<sup>58</sup> this study does not presume a particular

<sup>55</sup> E.g. Harper and Price, 2011.

<sup>56</sup> A guide to policy evaluation and analysis that is published and continuously updated by the Government Social Research Unit, which is based in the Cabinet Office. See, e.g. GSRU, 2007.

<sup>57</sup> Cabinet Office, 2003.

<sup>58</sup> This is the idea that actors' interpretations and uses of terms are based on a finite number of examples and emerge through social interactions. It is through sanctioning one another's application of a term that people construct the meaning of a term. Judgements about what counts as a valid application are shaped by these interactions as well as engagement with the

interpretation of social research to be more correct than others. Rather, exploring the multiple meanings of social research amongst civil servants in DEFRA and DECC, how these meanings gain currency, and what their implications are will be an important empirical task for this project. And as Stuart Blume has argued, we can expect the mobilisation of different meanings to be shaped by the expectations and perspectives of actors within and around the given government department.<sup>59</sup> Furthermore, it also follows from meaning finitism that we should beware of reifying the forms of social research listed above. Social research, like all concepts, is open-ended, and will therefore take on new meanings over time.

Before we begin to explore how social research has been constructed and mobilised within the contexts of DEFRA and DECC over the course of the departments' histories, it is worth providing a basic background to the civil service in general, and the structures associated with government social research in particular.

#### **4. The UK's Civil Service**

In the United Kingdom, the Prime Minister appoints each of the Government's Cabinet Ministers, most of whom are given the title of 'Secretary of State' for a specific policy portfolio. Ministerial departments support these Cabinet Ministers (and the junior 'Ministers of State' who aid them) in the administration of their given policy portfolio.<sup>60</sup> The departments are staffed by 'civil servants' (also known as 'officials'). The most senior

material world, and therefore also involve actors taking account of interests (Bloor, 1997, p.70).

<sup>59</sup> Blume, 1987, p.90.

<sup>60</sup> HM Government, 2016.

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official in a department is the ‘Permanent Secretary’, who provides leadership to the rest. The organisations are then further divided into ‘directorates’ (or ‘divisions’), with Directors General providing oversight for teams that serve specific policy areas or provide administrative functions. Nowadays many departments also appoint a ‘Chief Scientific Advisor’,<sup>61</sup> typically from academia and of Director General standing, who is tasked with providing strategic oversight for the department’s use of science and research.

Structured in this way, the civil service is a hierarchical institution, such that an official’s grade will normally determine not only their pay but also which meetings they can attend and what level of responsibility and budget they are afforded.<sup>62</sup> We will see that social researchers typically occupy posts at grade 6 or 7 in the departments studied here (as ‘middle managers’), with many more economists, scientists, and engineers occupying roles in the senior civil service.<sup>63</sup> This has implications for the kinds of influence that different analysts can exert through their resources and access to meetings. Since civil servants are “encouraged to take decisions at the lowest level in the hierarchy at which they can confidently do so”,<sup>64</sup> their judgements are influential not only in delivering policies devised by ministers, but also in the construction of new policy ideas. For this reason, civil servants and politicians are often collectively described as ‘policy-makers’.

There is a long-standing convention, dating back to the implementation of the Northcote-Trevelyan reforms in the late 1800s, that civil servants do not

<sup>61</sup> HM Government, 2015a.

<sup>62</sup> Walker, 1987.

<sup>63</sup> See Chapter 4, Section 5 and Chapter 5, Subsection 3.2 for respondents’ accounts of the positions of different analysts in the hierarchies in DEFRA and DECC.

<sup>64</sup> Gummett 1980, p.10.

typically attain promotions within their current post.<sup>65</sup> This convention is justified as a measure to ensure that the recruitment in the civil service is meritocratic by preventing promotion through criteria that were deemed non-competitive – such as length of service.<sup>66</sup> Instead, civil servants typically seek promotion by competing for a post elsewhere – either in a different team or different organisation. It is typical for an official to seek promotion approximately every two years. And we will see throughout this thesis that this convention has epistemic consequences for policy-makers' engagement with social research expertise.

Civil servants are appointed independently of party politics, and are expected to commit to the Civil Service Code.<sup>67</sup> This stipulates that civil servants should “serve the government of the day” (whoever that may be) with ‘impartiality’ and ‘integrity’. In this way, their work is judged by its perceived utility towards the department’s overall aims. At the same time, civil servants look beyond the objectives of the current government, to ensure the institution’s own sustainability. In the words of the Head of the Civil Service at the time of writing, Sir Jeremy Heywood, the civil service “serves the government of the day, while retaining the flexibility to serve future governments.”<sup>68</sup>

<sup>65</sup> Hennessey, 1989, p.48.

<sup>66</sup> Hennessey, 1989, p.31.

<sup>67</sup> Civil Service Commission, 2014.

<sup>68</sup> HM Government, n.d.



## **5. Government Social Researchers in the Civil Service**

Since at least the 1920s, a distinction has been drawn between ‘generalists’ and ‘specialists’ in the civil service.<sup>69</sup> Generalists are those officials who are said to possess broad and ‘versatile’ skills and experiences relevant to public administration.<sup>70</sup> They often have responsibility for managing policy development and implementation projects. In contrast, a ‘specialist’ is considered to possess expertise in a particular domain and typically acquires a professional identity as a ‘government analyst’. Following Sheila Jasanoff,<sup>71</sup> the distinction could be understood as the product of boundary work which lends legitimacy not only to the analysts as an expert group isolated from politics, but also to the policy officials who benefit from being seen to draw upon independent expert advice from the specialists.

There are five distinct government service ‘schools’ that provide accreditation and support for each of the following groups of evidence-based analysts: natural scientists and engineers, economists, social researchers, statisticians, and operational researchers.<sup>72</sup> Social researchers are accredited by the Government Social Research Unit, which is situated in the Cabinet Office,<sup>73</sup> and accredited social researchers are said to belong to the ‘Government Social Research Service’ (henceforth ‘GSR’) – which is distinct, for example, from the ‘Government Economics Service’ (GES).

<sup>69</sup> Gummett, 1980, p.71.

<sup>70</sup> Gummett, 1980, p.70.

<sup>71</sup> Jasanoff 1990, p.236.

<sup>72</sup> HM Government, 2014a.

<sup>73</sup> According to an interview, the distinction between social research and statistics has occasionally given rise to the misconception that social researchers only specialise in qualitative methods when this is not the case. This in turn can have implications for how social research is conceived by civil servants.

The Government Social Research Unit was formally established in the early 2000s, as part of the then Labour Government's efforts to professionalise the civil service's social research community.<sup>74</sup> The unit was originally led by a grade 5 (i.e. senior civil service) 'Chief Social Scientist', but since 2010 the role has been split between two 'Heads of GSR' at a lower grade.<sup>75</sup> Each government department or agency with substantial social research capacity has a Head of Profession who holds responsibility for supporting social researchers within the organisation.

To support social researchers and maintain standards the Government Social Research Unit arranges regular events and produces professional advice guidelines – including the 'GSR Code',<sup>76</sup> which social researchers are expected to abide by. There is also a competency framework that outlines the specific skills and experience that researchers should exhibit at each grade, and which is used to assess whether a candidate is suitably qualified for a more senior position.<sup>77</sup>

Although practice will vary between departments and change over time, it is worth considering how social research expertise is constructed within the (latest version of the) GSR competency framework.<sup>78</sup> The framework identifies two strands of expertise: 'technical skills' and 'using and promoting social research'.<sup>79</sup> In terms of technical skills, members are expected to have an understanding and experience of a broad range of qualitative and quantitative methodologies, be able to identify research requirements and develop and design research projects – for both in-house

<sup>74</sup> Burnett & Duncan, 2008.

<sup>75</sup> According to a former Head of the GSR Unit.

<sup>76</sup> GSR Unit, 2009.

<sup>77</sup> GSR Unit, 2013.

<sup>78</sup> GSR Unit, 2013.

<sup>79</sup> GSR Unit, 2013.

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projects as well as external commissioning – and also to be able to manage and commission research projects in accordance with departmental procedures. In terms of ‘using and promoting social research’, members are required to: communicate research clearly and in a timely fashion to help policy colleagues, draw on and support the wider GSR network and cross-cutting resources, and work with a deep understanding of the policy context in which they operate. In addition, social researchers should act as ‘champions’ of social research, which involves “persuading others to support the research process, for example, industry bodies to release necessary information or policy customers of the value of social research”<sup>80</sup>. Also intriguing is the fact that, through the competency framework, government social researchers are encouraged to provide a ‘challenge function’ – to apply their expert judgement to confront colleagues’ ideas or decisions.<sup>81</sup> As GSR members progress in their career they achieve greater responsibility in the above areas. But topic-relevant knowledge is not included as a requirement. This is consistent with the fact that civil servants are incentivised to progress in their career through changing posts: acquiring transferable skills is more helpful than topical knowledge if one is to gain career progression in this way.

Government social researchers are thus professionally committed to not only serve the government of the day according to obligations in the Civil Service Code discussed above, but also to provide expert advice to particular standards. The implication of social researchers’ ‘hybrid’ identities as researchers and as officials is that they are expected to exert appropriate judgement in striking a balance between imperatives which may come in

<sup>80</sup> GSR Unit, 2013.

<sup>81</sup> GSR Unit, 2013.

tension. To be deemed credible experts amongst policy colleagues and external researchers they must be seen to uphold research standards.<sup>82</sup> If policy colleagues do not recognise or appreciate their expertise then opportunities for social research to contribute to policy development and delivery processes might be overlooked or alternatively projects may be managed by non-experts. Similarly, if external researchers do not recognise them as credible experts then they may refuse to engage with them on research projects or be publicly critical of them, which can in turn cause embarrassment to the department and damage social researchers' reputation internally. And at the same time, social researchers might find their value questioned if colleagues begin to doubt their commitment to the Civil Service Code.<sup>83</sup> Hence social researchers may be (or may consider themselves to be) bound by potentially conflicting demands and expectations.

An accredited government social researcher might have academic training in any of the social sciences, including in STS.<sup>84</sup> As part of the process for gaining accreditation, an analyst normally takes a written examination and/or interview. The researcher can then be eligible for positions that are specified for social researchers. But in practice accredited social researchers may hold 'hybrid' generalist-specialist posts or may even hold an entirely generalist position, while at the same time experienced social scientists (or otherwise accepted members in the department's social research community) might not yet have obtained the formal qualifications. And in the fast-moving (and often high-stress) environment of a government department,

<sup>82</sup> For which the "professionalisation" of the GSR service during the early 2000s was especially important – see Burnett & Duncan, 2008.

<sup>83</sup> Civil Service Commission, 2014.

<sup>84</sup> Government Social Research, 2010a, p.15.

social research projects may be worked on by officials with little or no recognised expertise.

## **6. Thesis Outline**

This thesis provides a historical account of social research within DEFRA and DECC by focusing on two key questions: how has ‘social research capacity’ changed over the years, and what influence have social researchers achieved? These questions form the backbone to the thesis, which consists of seven further chapters.

Chapter 2 sets out how I conceived, designed, and conducted a historical analysis of social research capacity and influence. The chapter discusses the decisions that I made in terms of topic, research questions, data generation, analysis, and efforts taken to secure the validity of the project findings. I then outline some limitations to this study and suggest ways in which the research might have been different.

Given the lack of relevant STS concepts for understanding research capacity and influence, I have drawn heavily on theory from policy studies, politics, organisational studies, geography, and the history of science to build a two-part analytical framework. This is the focus of Chapter 3. The first part of the framework begins by defining ‘social research capacity’ as it will be used within this thesis. It then provides us with the analytical tools to address our first concern – how do officials in DEFRA and DECC conceive of social research? That is to say, what do they understand social research to be? How do they interpret its role? And for what reasons is it valued? It emerges that understanding changes in these perceptions – what we might call *learning about* social research – is crucial if we are to understand social research

capacity and how it changes in an organisation. Furthermore, we see that we can only understand how policy-makers learn about social research by exploring the institutional, epistemic, and political context in which they work.

It is one thing to build capacity, but quite another to mobilise that capacity in an influential way. The second half of the theoretical framework (which is developed in Section 7) provides the analytical perspective which I use to explore the different types of influence that social researchers have exercised in specific policy areas.

The subsequent four chapters are empirical in nature. Chapters 4 & 5 analyse changes in social research capacity in DEFRA and in DECC respectively. Chapter 4 shows that between 2001-2015 DEFRA's officials continuously updated their understandings of what social research is. New interpretations of social research were proposed to officials by influential and interested actors who wanted to see a change in how the department operated. At various points in the department's history these included: the Secretary of State, the Chief Scientist and his academic advisors, the Chief Economist, and, once they reached a critical mass, the department's own social researchers. These actors not only promoted new meanings for DEFRA's officials, but also enabled the emergence of new types of roles that social research could play in policy processes – proving, for instance, that social research could contribute to even the most technical policy areas. I show that for different reasons and under different conditions, generalists across the department's policy areas – as well as more senior staff – increasingly valued social research. Focusing on the changes in perceived meanings, roles and value of social research in this way we can see how social research capacity has changed in DEFRA.

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The history of social research capacity in DECC over the seven and a half years of its existence (October 2008 - July 2016) can be understood in the same way. After a slow start due to indifference from senior officials towards social science, key actors began to raise concerns about the lack of social research capacity. These individuals, who included scientists and economists within DECC as well as social researchers elsewhere in government, were eventually successful in encouraging officials to recruit social researchers from 2010 onwards. At first social research's role was understood in very narrow terms, as useful for policy evaluation or for changing consumer behaviours within the new Conservative-Liberal Democrat Coalition Government's priority areas for the department. But in time social researchers, economists, and scientists all helped to enable social research capacity to flourish across the department – including in some technical policy areas that are not concerned with consumer behaviour. Despite some initial teething problems, it is clear that social research expertise came to be highly regarded across the organisation.

In Chapter 6, we move on to see how social researchers in DEFRA have achieved influence in a specific policy team. The policy team chosen for this analysis is the sustainable consumption and production (SCP) group, which hosted social researchers for approximately a decade. While at first social researchers' contribution was conceived by some actors as forming the basis for information provision, the analysts soon proved the value of their expertise (particularly in influencing citizens' behaviours) if engaged early in the policy process. They showed how social research could contribute positively to policy development and implementation – culminating with action-based research projects that enabled the co-design and testing of novel policy ideas, informed by previous studies. I argue that social researchers

have enabled DEFRA to move beyond deficit-model thinking in policy development for sustainable consumption and production, thereby changing the policy framing. This has, in some cases, resulted in what some researchers in STS refer to as 'reflexive' policy designs.

Chapter 7 completes the set by investigating the range and extent of social researchers' influence within policy teams in DECC, again with a particular focus on their expertise in understanding citizens' views and actions. For this, three policy teams in energy efficiency and demand reduction were chosen: those working on the Green Deal, on the roll-out of smart meters across the UK, and domestic heat policy. Intriguingly, while social researchers in DECC used similar methods as their DEFRA counterparts to understand citizens' perspectives, there is less evidence of social researchers achieving a significant change in any policy framing, seemingly due to the fact that they have been typically invited to engage with other officials at a late stage in the policy process. Consequently, while I do claim that social researchers have enabled DECC to move beyond simplistic understandings of citizens' engagement with energy efficiency and related technologies, the evidence suggests that their input never engendered greater institutional reflexivity within the department.

The final chapter takes a more holistic approach to the subject matter of this PhD by identifying cross-cutting themes. It begins with some comparisons between DEFRA and DECC's social research capacity and influence, highlighting the value of the theoretical framework applied to these cases. I then go on to draw some overall conclusions. Here, it is emphasised that throughout the thesis social researchers' challenge function emerged as a key theme for understanding changes in social research capacity and influence. We see that it is through challenging colleagues' assumptions about citizens,



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science, technologies, social science, and the role of government that perceptions change, with consequential impacts.

Furthermore, such challenge has over the years resulted in DEFRA and DECC becoming ‘epistemically dynamic’, in that they are departments where officials do change their views in the light of evidence from external actors. As well as epistemically dynamic, DEFRA and DECC are also shown to be ‘epistemically diverse’ – by which I mean that scientists, engineers, economists, statisticians, social researchers, and others have all expressed perspectives based on their understanding of the issues, and that these perspectives are not always in agreement or consistent. Such diversity is important for achieving greater effectiveness and democratisation in policy-making processes.

These conclusions have implications for prevalent academic conceptions of the civil service – particularly when dealing with technical policy domains. But they also suggest that more research is needed in DEFRA and in DECC’s successor (the Department for Business, Energy and Industrial Strategy, DBEIS),<sup>85</sup> to better understand other government analysts’ identities and interactions within the departments. I close the thesis by offering some normative reflections on the analysis presented here, and their implications for decision-making processes in respect to energy, environment, and food policy. In particular, it is argued that greater senior social researcher representation within DEFRA and DBEIS, and the introduction of a formal requirement that generalists engage with social researchers at an early stage, can support officials to work more effectively *and* more democratically.

<sup>85</sup> BBC News, 2016.

## **Chapter 2**

# **Researching the Researchers: Design and Practice**

### **1. Selecting Cases, Research Aims and Objectives**

**T**HIS CHAPTER outlines how the research was designed, and how it was conducted in practice. I begin this section with the problem of case selection because my attempts to solve it took me on a journey that would eventually reshape my research project.

In 2012, I completed a Master's degree in STS in which I indulged in many readings that were critical of policy-makers' understanding of citizens and their relationships with them – across a variety of technical policy topics including climate change mitigation, an issue in which I had previously worked and had a particular interest.<sup>1</sup> I was also aware that many of the STS researchers I was reading had engaged with scientists and policy-makers in various formats. I was therefore eager to go beyond these readings, and

<sup>1</sup> Chilvers and Macnaghten, 2011; Irwin, 2001; Wynne, 1996; Shackley and Wynne, 1996; Shove, 2010.

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explore to what extent STS analysts’ insights had been translated into the construction of climate science and mitigation policy, through a case study approach. While this seemed sensible at first, I soon found it problematic: what sorts of examples could justifiably be compared to discuss the use of STS ideas? I began to consider STS too diverse a field to be analysed in these terms. My supervisors suggested that a way out of this quandary might be found by conducting a pilot study with a small sample of STS researchers who could point me to examples around which I would identify appropriate cases of STS engagement with policy. This was an illuminating and productive exercise, and I am indebted to my seven interviewees for sharing their experiences, perspectives and insights with me.

Conducted in spring 2013, the pilot interviews (which were semi-structured and audio recorded) provided me with multiple but disparate examples of STS engagement with scientists and policy-makers. There seemed to be limited clear scope for elaboration of the interviewees’ stories into substantive cases – what more could I add that would be of interest and novel for the field?

To my surprise, a more fruitful line of inquiry emerged in what these academic researchers told me they did *not* know about: I was intrigued to note that three of these interviewees identified the same government social researcher in DECC as somebody who was making innovative contributions to the department. And yet these interviewees could tell me little about what this researcher did, or indeed what a social researcher in government does. Similarly, in DEFRA there had been civil servants who, in some respondents’ views, ‘got’ STS – but the participants could not tell me what, if any, impact this had on the department’s work.

It is these realisations that motivated me to search the analysis pages of DEFRA and DECC's archived websites, to find any mention of social science, how it is applied, and whether it serves as a channel for promoting STS ideas. I found that STS was not a term used on those pages, but intriguingly there were pages devoted to 'government social research'. I could see that there were entire communities of 'social researchers' within DEFRA and DECC.

This revelation inspired me. It seemed to me that this was a category of actors whose experiences had not been recounted in the literature, and whose presence suggested a complication to portrayals of DEFRA and DECC as departments that are deaf to social science. And although I found minimal evidence of this in my initial web search, my pilot interviews suggested that these actors may also play a role in translating STS ideas into these departments. I decided that my thesis could make a novel contribution to knowledge by providing an account of the experiences of social researchers within DEFRA and DECC.

With this new focus in mind I opted to shift my priority from 'etics' to 'emics',<sup>2</sup> that is, from understanding and applying academic perspectives on policy-making towards making sense of the lived experiences and worldview of civil servants and the actors they engage with. What mattered now for the purpose of my analysis was not to assess to what extent normative ideas from STS research were mobilised and interpreted by civil servants, but rather to provide an account of the experiences, meanings, and issues associated with being a social researcher within DEFRA and DECC, as interpreted by those actors and those they work with. And I realised that

<sup>2</sup> Jardine, 2004.

achieving this aim could support two broader (and, to my mind, worthwhile, objectives): i) to address a gap in the literature regarding the epistemic context within DEFRA and DECC and ii) to aid researchers in STS and related fields in understanding challenges and opportunities for research utilisation in these departments.

### 1.1 Research Strategy and Research Questions

My new research aim lent itself to an abductive research strategy (in Norman Blaikie’s sense),<sup>3</sup> in that I would seek to understand the experiences and meanings associated with social research in DEFRA and DECC. This involves developing theories that are “derived from social actors’ language, meaning and accounts in the context of everyday activities”.<sup>4</sup> But I was not only interested in social researchers’ experiences today – my pilot interviews and web search had already suggested that social researchers had a short history in DEFRA and DECC. So I saw the existence of these communities to be the result of recent social and historical processes.

To investigate these processes I opted for an ‘idealist’ ontology under an ‘interpretivist’ paradigm, according to which beliefs, discourses, meanings, and actions are understood as the products of social actors.<sup>5</sup> This enabled me to explore how beliefs, meanings, discourses, and actions – which may be taken for granted by civil servants and external actors – have come to be the way they are, as perceived by those actors in DEFRA and DECC and relevant stakeholders.

<sup>3</sup> Blaikie, 2009.

<sup>4</sup> Blaikie, 2009, p.89.

<sup>5</sup> Blaikie, 2009, p.99.

It follows from an abductive research strategy that I operationalise a constructionist epistemology:<sup>6</sup> if civil servants (and related actors') beliefs, meanings, discourses, and actions are formed through social interactions, then the data generated via interactions with these actors will reflect those interactions. Indeed, as we will see throughout this chapter, the historical account presented here could well have been different under different circumstances. As such, it is not tenable to assert that this study provides a singularly correct historical account of social research in DEFRA and DECC: other reasonable historical accounts could also be written. We will return to this issue of validity in Section 5.

It is with those ontological and epistemological assumptions that I pursued an abductive research strategy. But as Blaikie notes,<sup>7</sup> the abductive researcher might subsequently supplement the data generated with other concepts from existing literature to address questions that would be interesting to others in the field. This would involve shifting from an abductive to a retroductive or an inductive research strategy, in order to go beyond detailed accounts of actors' lives and develop an analysis that answers questions of relevance to a given research field. It is in this way that constructionist historians and sociologists of science are able to transition from an understanding of scientists' experiences to make more generalised claims about the ways in which knowledge claims are situated, contingent, and context-specific.<sup>8</sup> A similar transition is made in this thesis: while the first pair of empirical chapters develop a model to understand the changes in social research capacity in DEFRA and DECC as viewed by actors involved in the process,

<sup>6</sup> Blaikie, 2009, p.95.

<sup>7</sup> Blaikie, 2009, p.89.

<sup>8</sup> Jasanoff, 1990; Wynne, 1991.

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the second set of empirical chapters address theoretically important questions concerning the type of influence that social researchers have in these departments. In doing so, I maintain a commitment to the emic approach which privileges actors’ own accounts where these conflict with my assumptions or with existing theory.

To this end, this thesis addresses the following research questions:

*Research Question 1: How has DEFRA’s internal capacity for utilising social research changed since it was formed in 2001?*

*Research Question 2: How has DECC’s internal capacity for utilising social research changed since it was formed in 2008?*

*Research Question 3: How have social researchers influenced work on specific policy areas in DEFRA?*

*Research Question 4: How have social researchers influenced work on specific policy areas in DECC?*

For the purposes of examining social researchers’ influence (i.e. to address research questions 3 and 4 in Chapters 6 & 7 respectively), I chose to focus on social researchers’ work on policy areas that have involved considerable attention to citizens’ behaviours. The selected policy areas are DEFRA’s work on sustainable consumption and production, and DECC’s work on energy efficiency and demand reduction.

The selection of policy areas for addressing research questions 3 and 4 was made during fieldwork (discussed in the next subsection). When analysing

the first interviews I found that social researchers' work on understanding and influencing citizens' behaviours was a prominent feature in both departments, and was also described to be of paramount importance for any historical understanding of the significance of social research in DEFRA and DECC – indeed, some actors even considered 'behaviour change' as synonymous with social research, as we will see. As such, while that form of social science is not commonly associated with many STS researchers (whose influence I initially intended to understand as we saw earlier in this section), the chosen policy areas are exemplary cases for understanding the variety of forms of influence that have been achieved by social researchers and how these have been shaped by the conditions in which researchers operate. For this reason, Chapters 6 & 7 are not to be understood as comprising a comprehensive account of social researchers' influence in DEFRA and DECC – rather, they are to be seen as exemplary of the forms of influence that social researchers have achieved. With these points in mind, let us consider the approaches taken to data generation and analysis.

## 1.2 Data Generation

Having decided to pursue an abductive research strategy I reflected on the methods available to me for data generation. One option for such research is to use participant observation within the chosen policy institutions. Following Andrew Webster,<sup>9</sup> Kevin Burchell has argued that this approach would be fruitful in helping STS scholars to understand the "implicit and tacit modes of thinking, norms and assumptions" which operate within such

<sup>9</sup> Webster, 2007a, p.610.



organisations.<sup>10</sup> To do this I would follow social researchers within DEFRA and DECC, with the aim of making sense of their lived experiences. While this method has its merits, it would prejudice the current conditions of social researchers above those of the past. As such, it would not be particularly illuminating about how social research capacity has changed in these departments, and for what reasons.

Another option I thought about was to use focus groups. This method was also suggested by actors, as a means of gaining a deeper understanding into the use of social research in a broad array of policy areas. However, I reasoned that since focus groups can quell disagreement between actors this would not be conducive to understanding the range of perspectives of different actors.<sup>11</sup>

Reasoning along these lines, I chose to use a combination of document analysis and interviews with key past and present actors. My first step in data generation was to compile a spreadsheet of documents produced or commissioned by DEFRA and DECC. Documents were arranged in historical order by publication year, and included on the basis of satisfying one of two criteria: that they either discussed (or had implications for) DEFRA or DECC's engagement with social science, or they might constitute examples of the research products of social researchers in DEFRA or DECC. To generate this spreadsheet I conducted online searches through the historic webpages of DEFRA and DECC,<sup>12</sup> as archived by the National Archives. I was fortunate to find that links for most pages dating back to DEFRA's formation in 2001 were preserved and accessible from my own computer. I

<sup>10</sup> Burchell, 2009, p.59.

<sup>11</sup> Bryman, 2016, p.515.

<sup>12</sup> E.g. DEFRA [National Archives], 2001; DECC [National Archives], 2009.

started to compile this spreadsheet in spring 2013, and continued to develop it during fieldwork as interviewees pointed me to documents they deemed important.

At the same time as collating documents, I prepared to conduct semi-structured interviews with civil servants and related actors. Semi-structured interviews were preferred to fully structured (and unstructured) interviews because they enable the analyst to address specific pre-defined questions, while allowing for any emerging insights to be explored through 'in-flight adjustments' as appropriate.<sup>13</sup> This seemed particularly suitable for my purposes since I wanted to maintain control of a given interview so that I could address different periods of the departments' history, while at the same time acknowledging that prior to conducting interviews I knew very little about social researchers in DEFRA and DECC, and therefore there would no doubt be plenty that I might not have asked about but which the interviewee considered important.

I began developing my list of potential interviewees using purposive sampling.<sup>14</sup> Starting with a handful of names from the pilot interviews, I sought to supplement these by picking out names from the documents I could find, and through broader web searches. I also benefited from chance encounters at conferences. I wanted to target actors who i) were active at different time periods, ii) would alert me to key issues and events, and iii) could help me reach a range of other actors in DEFRA and DECC. Through this process I identified 35 names of people who I might interview, trying to ensure that I had an even distribution of actors from different time periods (i.e. roughly fifteen who were active in DEFRA between 2001 and 2008, and

<sup>13</sup> Bryman, 2016, p.201.

<sup>14</sup> Bryman, 2016, p.419.

15 who were active in DEFRA and DECC between 2008 and 2013). Conscious of the limits of my understanding at this stage, I did not stick too strongly to this list, but rather selected a handful of different actors who could provide me with a useful starting point, and then asked them for names so that I could improve my sample of interviewees through the snowballing technique.<sup>15</sup>

Aware that snowballing has the potential limitation that one might develop a homogeneous sample,<sup>16</sup> I planned to ask my interviewees to suggest actors with different perspectives as well as actors whose perspective they shared. Interviewees also pointed me to new documents that I had not been aware of, and to issues that I had not considered, which I then explored through more document analysis and subsequent interviews. In this way, I pursued an iterative triangulation process.<sup>17</sup> This is useful since documents and interviews can be used together to address the blind spots of the other: interviews may reveal interpretations or meanings within a text that are not obvious to the uninformed reader, and likewise documents can record events or decisions which the interviewee may not mention in interviews.<sup>18</sup>

From spring 2013, I began to prepare for fieldwork. But I had the good fortune to have been offered an ESRC-sponsored internship with the Scottish Government’s Environment Social Research team, based in the Rural Environment Science and Analytical Services team in Edinburgh. This placement, which I held between September and December 2013, was designed as a work placement rather than fieldwork. Nonetheless, the placement provided me with first-hand experience of being a member of a

<sup>15</sup> Bryman, 2016, p.415.

<sup>16</sup> McPherson et al., 2001.

<sup>17</sup> Stoecker 1991, p.92.

<sup>18</sup> Blaikie, 2009, p.263.

community of government social researchers in the area of environment, food, and energy policy. This exposed me to the activities, interactions, and discourse of a body of social researchers who were akin to the analysts I would be studying in DEFRA and DECC. Nothing could have better prepared me for what I would encounter. In addition to acquiring a sense of the kinds of issues that my interviewees would discuss with me, I also inferred useful tricks for improving success during my fieldwork. For instance, I noticed that social researchers – indeed civil servants in general – would often respond to low priority emails when they first arrived at their desk, or else before leaving at the end of the day. I found that emails sent during these times were more likely to receive a quick response than emails sent during the middle of the day. Observations such as these helped to shape the way that I would subsequently approach and conduct my research interviews.

Thus, instead of conducting interviews in summer and autumn 2013 as originally planned, I spent the months before and during my full-time internship with the Scottish Government to prepare for my interviews and gather documents. At first I aimed to complete interviews between December 2013 and April 2014, during which time I would reside at my parents' house in London for ease of access to actors in and around DEFRA and DECC's offices.

I presented this study as 'a history of social research in DEFRA and DECC' to my prospective interviewees (see Appendix 1 for an example of pre-interview correspondence), and I found that many civil servants, academic researchers and consultants were surprisingly willing – eager, even! – to take part. For some actors, this was because they wanted to contribute to a historical account, while for others it was seen as a useful exercise in

highlighting the contribution of social researchers - with all the legitimacy that comes with an outsider's analysis. Some engaged in the project because they were encouraged to by others. These different motivations will no doubt have influenced the interactions we had in the interviews.

As I had hoped, the interviewees kindly suggested other key actors who I should interview, as well as bringing my attention to key documents to add to my list. Indeed some were particularly supportive and provided me with additional information or invited me to meet on a regular basis to update them with my findings. In DEFRA's case, I was invited to an incredibly informative meeting of the social research community, which elucidated what they deemed to be the key issues they faced. This meeting also served to prime interviewees about my project and my wish to interview them, and gave actors an opportunity to self-select themselves to be interviewed by emailing me directly – which two informants did, to my surprise.

Aside from the pilot interviews discussed above, I conducted 46 interviews with 45 different participants in total. Three interviewees agreed to be interviewed a second time as I had follow-on questions for them. And in two cases I interviewed two actors at the same time – in both cases this was because the interviewee had invited another actor along to take part. Table 1 below provides some basic non-identifiable information about the interviewees. Note that in one case an interviewee was interviewed for two positions that they held over the time period concerned, such that the sum of positions (46) exceeds the sum of actors interviewed (45).

Table 1: Interviewees Arranged by Position

Position	Number of actors
Academic researcher	11
Social researcher in DEFRA or DECC	17
Other civil servant	13
Non-academic research consultant	5

Of the 30 civil servants selected for interview, 15 were chosen because they had worked for DEFRA, 11 because they had worked for DECC, and four because they either worked for or with both DEFRA *and* DECC. The slight weighting of DEFRA above DECC actors is justified on the basis that DEFRA has a longer history than DECC. Prior to starting the interviews, I conducted the University of Edinburgh's self-assessment for research ethics, and concluded that the interviews would not go beyond Level 1 – i.e. I identified no significant ethical risks to myself or to participants.

The interview codes used to cite interview material throughout the thesis broadly map onto the positions in Table 1, although often it is appropriate to be more specific when referring to the interviewee's position. For instance, DECC's Head of Policy Evaluation was a social researcher with a leadership role in the department, and so, with the actor's consent, that researcher's specific title is given to contextualise the reader's understanding of the data provided. In some cases it was also appropriate to highlight that the actor was not in the described post at the time of interviews, by referring to them as a 'former' official. For each quotation, the precise wording of the interview code was checked with the participant. Where multiple actors were assigned the same interview code (as was the case with DEFRA social researchers), they are numbered in order of appearance in the thesis document.

## **2. Conducting the Interviews**

Following examples provided by one of my supervisors at the time, Sarah Parry, I devised a standard consent form that would be signed prior to every interview (see Appendix 2). The vast majority of civil servants insisted that I anonymise their names in publications. I did not explicitly ask interviewees to state whether they would like to have any quotations checked prior to publication, but this was requested by almost every civil servant as a condition for the interview. Some civil servants went further than this, insisting that the full text of any writing I produced about their department could be checked for factual inaccuracies. To me this seemed reasonable and indeed constructive, as it provided an opportunity to receive feedback (and challenge) from interested parties, while allowing me to maintain independence over the analysis and style.

All topic guides for interviews were designed along similar lines (see Appendix 3 for an early example). I would invariably ask about the interviewee's background, as well as ask them to provide examples of their engagement with social research in DEFRA and/or DECC: who they interacted with, how insights were discussed and applied, who they saw as relevant actors and institutions, whether they had faced any issues or barriers, and whether (and how) things had changed over time. Following a tip I heard in the data collection course in my Master's year, I always asked 'how' questions rather than 'why' questions – the former enables one to explore processes, while the latter can invite post-rationalisations as justifications for what happened, and may also invoke a defensive response from the interviewee.

The vast majority of interviews were conducted face-to-face, and I preferred this on the basis that it enables a deeper connection and rapport to be built with one's interlocutor. On a handful of occasions face-to-face meetings were not possible, and telephone or Skype interviews were used instead. Telephone interviews were also used in the three short follow-up interviews I conducted as it was more convenient to do so. Most face-to-face interviews were performed at the place of work of the interviewee, but at the suggestion of the interviewees a small number took place in cafes, bars, or their personal homes. The duration of the majority of interviews was one hour, but some were considerably longer. The most leisurely interview lasted four and a half hours in the comfort of the actor's home. It involved the consumption of a fine bottle of red wine and despite the occasional digression and overly-thorough repetition of interview questions towards the end, it was an invaluable resource. All interviews were audio recorded<sup>19</sup> and I used Express Scribe software to transcribe them.

The opportunity to participate was declined in a handful of instances, and while this was to be expected, I must acknowledge that it resulted in some gaps in the story I could tell. The first social researcher to work in DEFRA was supportive of the project but was unable to take part for personal reasons. Others were on extended periods of absence for one reason or another. A small number, including past senior officials in DECC and the Cabinet Office's Behavioural Insights Team, responded to say that they were too busy or claimed that they would not be able to help with this project. As a result, those actors' perspectives could not be fully accounted for in the

<sup>19</sup> Although in one Skype interview a foolish arrangement involving earphones and a dictaphone resulted in my recording just my voice until I noticed the issue and changed the arrangement.



analysis. And while every effort was made to provide an impartial account of different actors’ perspectives and experiences,<sup>20</sup> this meant that it was not possible to present those actors’ views in balance with the criticisms others have made against them. This is consistent with the issues that Scott, Richards and Martin also faced when attempting to achieve impartiality in practice.<sup>21</sup>

After each interview I would write an entry into my research diary, which helped me to take stock of key points, build up a provisional picture of what I had learned so far, and think ahead to identify how gaps in my understanding could be addressed in subsequent interviews. Having noticed that I was arranging interviews faster than I could transcribe them, and that for this reason I was missing opportunities to deepen my understanding by addressing particular points with new interviewees, I decided to extend my stay in London till August 2014 so that I could spread out my interviews and conduct a greater portion of the transcription and analysis during this time. With hindsight, I think this was a hugely important step for ensuring that I got the most out of my interviews as I went along.

By the end of July 2014, I felt confident that I had enough data to draw a line under this stage of fieldwork. I had not achieved ‘saturation’<sup>22</sup> on every issue – there were certainly more examples of using social research that I could learn about, as well as more to understand in terms of actors’ experiences. But on some particular matters that interviewees highlighted as important for understanding the history of social research in these departments – such as the process by which social research communities had

<sup>20</sup> In line with David Bloor’s Strong Programme in the Sociology of Scientific Knowledge (Bloor, 1991, p.7).

<sup>21</sup> Scott et al., 1990.

<sup>22</sup> Mason, 2010.

grown in DEFRA and DECC, and on social researchers' work around influencing citizens' behaviour, I did consider my data gathering to have reached saturation. On these issues I judged that I had 'rich' and 'thick' data:<sup>23</sup> I acquired many detailed and nuanced insights about significant developments from the time that DEFRA and DECC were formed to the present day and, on the whole, I was not gaining new insights from subsequent interviews. It helped that I began to transcribe and analyse my data during this fieldwork stage,<sup>24</sup> as this enabled me to aim for a broad enough array of actors, to ask the same questions to different actors, and to triangulate data from different sources – all of which help analysts to achieve data saturation.<sup>25</sup>

Yet, as Juliet Corbin and Anselm Strauss emphasise, saturation is not reached during data generation but during data analysis.<sup>26</sup> I knew that there was more I could find out from interviews, but I ended the interview stage in August 2014 – aware that I could return to my respondents to address any gaps I found. As expected, after months of analysing my data I started to spot gaps in the narratives that I began to construct, and sought to fill these gaps through follow-up interviews and email exchanges with my respondents.

Having discussed the design and practicalities of conducting fieldwork, I will now explore how data were analysed for this thesis.

<sup>23</sup> Corbin and Strauss, 2008, p.108.

<sup>24</sup> Miles & Huberman, 1984, p.49.

<sup>25</sup> Corbin and Strauss, 2008, p.145.

<sup>26</sup> Corbin and Strauss, 2008, p.145.

### **3. Data Analysis**

As discussed in the previous section, I began to analyse documents prior to conducting interviews. I started by choosing DEFRA’s science and research strategy documents which had been published in 2003, 2006, 2010, and 2014. I explored how the terms ‘social science’ or ‘social research’ were used in these publications, and drew comparisons between the interpretations presented between the different reports. Following Corbin and Strauss’s approach to grounded theory,<sup>27</sup> I began with a ‘microanalysis’ of these documents, which involves isolating a particular unit – a word, phrase, or sentence, and identifying the different possible meanings that might be invoked. It is a highly detailed (and time consuming) approach – intended to help the researcher to explore interpretations of the data. Inspired by the theory of meaning finitism,<sup>28</sup> I wanted to understand what ‘social research’ meant to actors in DEFRA and DECC at different times. I coded for different interpretations of ‘social research’ represented in those documents, such as understanding citizens’ behaviours, investigating the issues faced by concerns of rural communities, and exploring citizens’ views of new technologies.

This initial analysis enabled me to better prepare questions for my interviews – which I would in turn transcribe and analyse using NVivo. Over the course of my fieldwork I coded my data and found three emerging themes: one was associated with explaining the growth of social research communities within a department, the second was about understanding the

<sup>27</sup> Corbin and Strauss, 2008, p.59.

<sup>28</sup> Bloor, 1997, p.70.

way that social research had been used to contribute to a department's work on influencing citizens' behaviours and the third concerned how the idea of the public was mobilised by actors in DEFRA and DECC (sometimes as citizens, sometimes as consumers, and occasionally as research subjects). And I began to see these as the three 'core categories' of my thesis.<sup>29</sup> During the fieldwork stage I also discussed with my supervisors a draft contents page for the thesis as a whole, in which I set out ideas for three empirical chapters – one along the lines of each of these themes. But as I gained deeper insights into the histories of social research in DEFRA and DECC, I found that my idea for the first empirical chapter (about the growth in communities of social researchers in DEFRA and DECC) would better be split into one chapter devoted to DEFRA's history, and another devoted to DECC's history. Likewise, the history of social research being used to influence behaviours in DEFRA was distinct from that in DECC, and so that empirical chapter should also be split. Last, the original idea for the third empirical chapter, on the different interpretations of 'the public' at play, was dropped as I was less clear on its potential salience for development.

Towards the end of my fieldwork I began to write up my analysis into drafts of empirical chapters. Some of these writings constituted 'sacrificial writing',<sup>30</sup> where I would write for the purpose of clarifying my understanding, 'safe' in the thought that I would later discard the document because it was too finely detailed in its analysis or because it was otherwise too experimental and provisional. At this point I no longer committed to updating my NVivo project with new documents, preferring instead to analyse documents and transcripts as I went along. I found this more

<sup>29</sup> Corbin and Strauss, 2008, p.104.

<sup>30</sup> Jane Calvert's term, unpublished.

efficient given that I had already identified core categories around which to frame my chapters.

#### **4. Reflections and Practicalities**

In outlining the research strategy for this project in Subsection 1.1 of this chapter, I stated that I intended to pursue an abductive research strategy, which would enable me to uncover actors’ meanings and experiences. While this may have been a noble intention, with hindsight I see that it would have been impossible to produce the narratives that I have if the data generation and analysis were not laden with theory, presumptions, and expectations from the outset. I explore how these influenced my research below.

First, it must be acknowledged that this research project is premised on the concept of meaning finitism described above: I was expecting respondents to recount to me how social research has had different meanings in different situations and at different times. This is indeed what I found, and it would be hard to imagine finding this if I had presumed that I already knew what social research would mean in these contexts.

There are many other ways in which I brought my own expectations and concepts to my analysis. The literature I had read and prior interactions (including the pilot interviews) had prepared me to find DEFRA and DECC to be dominated by actors who did not value social research very much.<sup>31</sup> My experience at the Scottish Government had revealed to me some ways in which social research might be used in the areas of environment, food, and

<sup>31</sup> E.g. Irwin, 2006; Kearnes, Grove-White, et al., 2006; Wyatt, 2008; Wynne, 2007.

energy policy.<sup>32</sup> My prior work with an environmental think-tank, Green Alliance, had brought me in close contact with DEFRA and DECC's work on behaviour change – indeed I was, in 2010/11, using social researchers' research products without being aware of it. All of these examples helped to shape how I prepared and conducted interviews and analysis.

Moreover, I suspect that the way that my own identity was constructed in interactions with my interviewees will have shaped their responses. First, it must be noted that civil servants and research contractors are committed to not disclosing what may be considered sensitive information to non-government actors.<sup>33</sup> In addition to this, many were cautious not to damage working relationships with internal and external colleagues. While I promised to anonymise interviewees' names as requested, one's identity as a particular *type* of actor could not be easily protected. Aware of this, some were careful to offer a more diplomatic account than they might have done otherwise. There were also many instances where interviewees avoided answering a question, or where they asked that I do not quote them on sensitive issues they discussed. And although these actors could be described as 'elites', I was also conscious that social researchers were also, in a sense, a vulnerable group<sup>34</sup> - they and those who supported them had struggled to make their case for social science heard over the years. I saw no benefit in making them more vulnerable by disclosing narratives which they or their colleagues preferred to be kept out of this thesis. For that reason I often obliged, but on occasion I was given permission to paraphrase key points.

<sup>32</sup> Such as the Individual-Social-Material toolkit for behaviour change (Horne and Darnton, 2013).

<sup>33</sup> For civil servants this obligation continues for three years after leaving their post, according to one former civil servant.

<sup>34</sup> Smith makes a similar point that civil servants are not always easily characterised as elites (2008, p.112).

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If I had been conducting this project as an insider in these departments I can imagine that the data generated would have looked different. Indeed on one occasion I found that issues were more candidly discussed in published reports than they had been in interviews.<sup>35</sup>

Alongside my identity as an ‘outsider’, my identity as a social scientist in STS also had implications for how my interviewees engaged with me. Many actors were aware of STS research and discussion about the field often preceded or followed the interview – some spoke positively of the field and its luminaries, while others were critical. Consequently, some expressed suspicion about my intentions, although on the whole most saw value in the project. For some interviewees then, my academic identity is likely to have shaped the sorts of responses they gave – for instance about the interaction of different epistemic perspectives. In one case, an interviewee even used concepts from the field to explain what they saw as the significance of the DEFRA-DECC Social Science Expert Panel:

You’re creating an object... I’m reminded by saying that it’s a ‘boundary object’...is that an STS kind of term? Acting as a boundary between these two things, there’s a physical entity that takes shape?<sup>36</sup>

Furthermore, I noticed that a group of civil servants used the term ‘practices’ instead of ‘behaviours’ during interviews, and I infer that this was a conscious effort to express to me and my readers that they were aware of behavioural and social practice theory approaches and open to the use of both (a matter we will revisit in the empirical chapters).

<sup>35</sup> DEFRA SAC’s report (2006) is more revealing about the barriers to growing social research capacity in the department at that time than some interviewees were willing be.

<sup>36</sup> A former social researcher in DECC.

Similar dynamics will have been at play in interviews with academic researchers, some of whom were in STS (or related) fields, while others were not. Of course, being a member of the STS community exposed me to more STS actors than others, and I aimed to counteract this by following civil servants and other actors' suggestions for who else to interview.

There is also likely to have been an important gender dimension to the interviews which I was not able to investigate in depth in this thesis, but which merits further study.<sup>37</sup> It is widely recognised by civil servants that government social researchers are more commonly female. Their contribution is often undervalued by their colleagues, who are more typically male. It is striking that while the gender divide was not mentioned spontaneously in the vast majority of interviews, the one social researcher who did bring my attention to it in interviews was male. This suggests that female researchers may have been less comfortable discussing gender issues with me. Clearly then, the data generated could have looked very different under different circumstances. A future research project may explore the gender dimension of analytical services in government in more depth.

The preceding paragraphs indicate ways in which the analysis might have been different under different circumstances. But this is not to dismiss the findings. The next section outlines steps that I took to maximise their validity in as far as possible.

## **5. Internal and External Validity**

The previous section addressed ways in which the findings of this project have been shaped by subjective judgements and contingencies. This suggests

<sup>37</sup> Manderson et al., 2006.



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that a different researcher (one who was not male, and/or was not in STS, and/or was working within the civil service) may well have written a different history of social research in DEFRA and DECC. Nonetheless, this in itself does not show that my findings are invalid, just that the claims made could be different. I took many steps to maximise the internal validity (i.e. the accuracy of the claims made within the empirical findings presented) as well as the external validity (i.e. the generalisability of findings beyond the findings presented).<sup>38</sup> These steps are the focus of this section.

All quotations were sent to interviewees to be checked for accuracy as well as to address any anonymity concerns. This was a lengthy but constructive process. As Randy Stoecker argues, an important sign of internal validity is that interviewees accept “that the behaviours, motivations and meanings we attribute to them are indeed their behaviours, motivations and meanings”.<sup>39</sup> To this end, quotations were sent to interviewees along with the surrounding passage and an accompanying abstract explaining the argument of the overall chapter. In this way I showed them not only the quotation to be used but also how it is interpreted and its significance within the overall narrative. In addition to this, experienced civil servants in both DEFRA and DECC wanted to see full copies of drafts of the thesis and articles for comment.

This process on the whole helped to identify factual inaccuracies and nuances, and rarely was the interpretation of any quotations found to be problematic. There were some instances where civil servants did suggest changes that went beyond issues of accuracy and were more related with how the department is represented to external audiences. To take one example, a researcher suggested I remove reference to the political context in

<sup>38</sup> Stoecker, 1991.

<sup>39</sup> Stoecker, 1991, p.107.

which their research was conducted. This was perhaps for fear that political motivations for a project would be interpreted as constituting bias in the project. This seemed to me a remarkable request from a researcher within a government department, and I did not accept the recommendation on the basis that it was a stylistic point rather than a case of factual inaccuracy. In more typical cases, actors requested that they change the wording of their quotations – usually to improve its readability, but sometimes because they feared how the issue might be interpreted. Indeed one of my proudest achievements is that I found ways of expressing and substantiating key arguments while, on the whole, allaying actors' concerns about how they or their colleagues would be represented in the public domain.

Internal validity was also strengthened through regular interactions with civil servants and external researchers. Since completing fieldwork I have been invited to present my research to people in DEFRA, DECC, and the DEFRA-DECC joint Social Science Expert Panel, and also to seminars and workshops at seven academic institutions across the UK. In most cases, there were interviewees present, along with relevant actors whom I had not interviewed. These meetings were all thoroughly constructive. Occasionally the discussions would have me reassess my interpretation of the data, or point me to more data which helped to nuance a point. But I also found that, on every occasion, my broader argument resonated with at least some audience members' interpretations of the data I provided. Indeed, in one seminar at a university in London, an academic researcher (who was not included as an interviewee but who could have been) remarked that my presentation was 'like seeing my career before me'.

Moreover, I found that such meetings also provided, to an extent, checks on the external validity (i.e. generalisability) of my research findings. External

validity is generally considered to be a problem with case study research<sup>40</sup> (although drawing comparisons between DEFRA and DECC helps to improve this to a degree). Conversations with civil servants and external researchers who were not interviewed for this project revealed to me that they too would, without prompting, provide accounts of DEFRA and DECC's use of social research which resonated with my own. They often spoke of the 'learning journey' that the departments had been on, and of a multiplicity of perspectives housed within the same walls in Whitehall. Most reassuringly, I found that my presentation in May 2016 to the Scottish Government's team of social researchers in the Rural Environmental Science and Analytical Services division (the team I had previously worked with, but which now consisted of entirely new faces), resonated with those researchers' everyday experiences. The ensuing frank and open discussion provided an opportunity for social researchers to express their views and experiences which seemed consistent with those of their colleagues 'down south', and we took this as an opportunity to discuss what could be done differently – what has been tried and what may be tried in the future. Discussions such as these fill me with confidence that my analysis satisfies a minimum degree of validity, and I submit this thesis to academic debate in the hope and expectation that its findings are further nuanced and developed in its reception.

<sup>40</sup> Stoecker, 1991, p.91.

## **Chapter 3**

# **A Two-Part Theoretical Framework for Analysing Social Research Capacity and Influence in DEFRA and DECC**

### **1. Introduction**

**T**O ANSWER the research questions set out in the previous chapter, I have gone beyond the STS literature and drawn insights from other fields including policy studies, politics, and the history of science. This chapter analyses key threads from these literatures to produce a two-part theoretical framework, which in turn will be applied as a heuristic tool to explore changes in research capacity and influence in the government bodies examined here. Part one of the framework, which provides the concepts for analysing changes in a department's research capacity, is developed in Sections 2 to 5, and is tested through its application to historical cases in Section 6. As we will see, the toolkit draws the analyst's attention to significant features in the institutional, political, and epistemic context that shape how key actors perceive social research, which in turn enable changes in social research capacity.

Many of the concepts discussed in those sections are also of relevance for addressing research questions three and four, regarding the influence that social researchers have achieved in DEFRA and DECC. But two further perspectives will also be important for approaching these questions: the first concerns the types of learning that can occur within an organisation, and the second relates to the forms of influence that the researchers might achieve. These are discussed in Section 7, before conclusions are presented in Section 8.

## **2. Social Research Capacity: What Is It and How Does It Change?**

Early in the process of analysing documents and interview data, I noticed that civil servants saw the number, seniority, and resources of social researchers as measures of ‘social research capacity’. But the idea of research capacity was not clearly defined nor used consistently. This section sets out how this term will be understood in this thesis.

A useful working definition of ‘research capacity building’ is found in the health services literature, where it is defined as “a process of individual and institutional development which leads to higher levels of skills and greater ability to perform useful research”.<sup>1</sup> This definition is consistent with the description above, but it raises more questions for the STS analyst – what do actors consider to constitute appropriate skills, or useful research? These too can change over time, and so the proliferation of different types of research may also be indicative of an expansion of social research capacity.

<sup>1</sup> Trostle 1992, p.1.

As such, the first half of this thesis explores the processes by which social research capacity has changed in terms of how many researchers there are, how senior they are, and their access to resources, but also in terms of changes in the variety of forms of research that those researchers conduct and, relatedly, changes in the types of contribution that are deemed useful. These indicators may be intertwined: the number of researchers will be influenced by the range of contributions and forms of expertise that are seen as appropriate for a department to possess. But they may also move in opposite directions – the number of social researchers could rise while the concept of ‘social research’ becomes narrowly defined around one or a few of the specific forms of knowledge described in the introduction. This may complicate the idea that social research capacity could be said to expand or shrink in a general sense. Nonetheless, this range of indicators can be used to build a qualitative sense of the types of changes in what is taken by actors to constitute social research capacity over the years.

Since on both the empirical and theoretical counts the notion of research capacity is strongly associated with the attributes of social researchers, we will start by investigating what they do within government departments.

A commonsensical view of social researchers is that they are there to provide social science knowledge to the generalists that they work with – to ‘speak truth to power’.<sup>2</sup> But we have already seen in the introduction that government social researchers’ expertise is defined in terms of their *skills*, not topic-specific knowledge.

Nor should we assume that they are employed to facilitate the exchange of knowledge between policy officials and academic researchers qua

<sup>2</sup> Wildavsky, 1987.

‘knowledge brokers’<sup>3</sup> (or alternatively ‘brokercrats’ for knowledge brokers working within a policy institution).<sup>4</sup> While this might seem an obvious role for social researchers, Gill Clark and Liz Kelly’s study of knowledge exchange in the Scottish Government provides a brief (and rare) discussion of social researchers in the civil service. The authors reveal that for the analysts they studied, providing a knowledge brokerage function qua brokercrats “is a layer of ‘extra effort’ applied over their mainstream work programmes”,<sup>5</sup> and thus not recognised as a researcher’s key function. But these authors do not offer further insights into what social researchers *do* do within government.

Oddly, the most recent account of what social scientists do within the UK’s civil service was published by Robert Walker in 1987. His picture is consistent with Clark and Kelly’s, in presenting engagement with academic social science as a relatively marginal aspect of researchers’ work.<sup>6</sup> But Walker’s eclectic study also reveals a surprisingly broad variety of contributions that ‘social science research officers’ (the predecessors to ‘government social researchers’) made in the civil service at the time – emphasising that there was considerable diversity in the nature of their contribution across different departments.<sup>7</sup> First, he reports that the social science research officers in the Department of Health and Social Security typically did not conduct their own research – instead they would commission it from external contractors.<sup>8</sup> By contrast, prior to 1980 researchers in the Home Office – who were in a separate unit from other civil

<sup>3</sup> Knight & Lyall, 2013, p.309.

<sup>4</sup> Clark and Kelly, 2005, p.1.

<sup>5</sup> Clark and Kelly, 2005, p.32.

<sup>6</sup> Walker, 1987, p.148.

<sup>7</sup> Walker, 1987, p.144.

<sup>8</sup> Walker, 1987, p.144.

servants and were managed by the Chief Scientist – would carry out research and develop theory akin to university staff. But in 1980, alongside reductions in staff numbers, came a restructuring that would make the researchers focus more on addressing what their generalist line-managers deemed to be gaps for research.

Similarly, the team of researchers in the Department of the Environment was disbanded and individual researchers were embedded within policy teams in 1980 to stimulate better collaboration between them, with this move then being reversed a few years later.<sup>9</sup> According to Walker, the focus on policy-relevant research tended to result in a good proportion of the research resembling what he terms “‘up-market’ market research”, as opposed to in-depth studies informed by social science theory. Another consequence, he argues, is that this brought a shift towards prioritising short-term research projects ahead of long-term, strategic projects. In this way, the location of researchers – either in a dedicated analytical unit or embedded within a policy team – affects the type of work they produce.

These two points emphasise that the type of work that is deemed to constitute appropriate output from social research ‘capacity’ in a department is likely to vary over time and across departments. It may include engagement with academic projects and constructing a deep knowledge base, and/or it may involve quick-turnaround empirical research projects.

But Walker’s analysis also clearly shows how changes in capacity are linked with officials’ ideas about social research – which are themselves influenced

<sup>9</sup> Unfortunately for the purposes of this project, Walker does not elaborate further upon the role of social science research officers within the Department of the Environment, nor could any other study be found on these actors.



by the circumstances. Taking inspiration from a combination of studies<sup>10</sup> and analysed documents<sup>11</sup> which explicitly discuss the role and value of social research, we can categorise actors’ ideas about social researchers into three sets. These are ideas about: i) the meanings of social research, ii) the roles it can play, iii) its value for the officials concerned.

To consider civil servants’ perceived meanings of social research first, Walker argues that within government, sociology and psychology were marginalised, and social research was mainly interpreted in terms of empirical ‘fact-gathering’ as opposed to theoretically-driven work. Clearly then, ideas about what social research *is* influence what sort of activities social researchers do.

Similarly, Walker shows that the activities of social researchers are influenced by officials’ conceptions of the role that social research can play, which in turn depend on who makes decisions about what research gets commissioned and how it should be used. He notes, for example, that in the 1980s social science research officers were often responsible for not only commissioning projects but also for proposing and specifying them, on the grounds that they were “the group best able to appreciate the potential of research”.<sup>12</sup> This afforded social science research officers a degree of autonomy over their activities.

Digging further, we find that the idea of social science research officers as the best-placed officials to make decisions about a department’s research needs is consistent with Lord N. V. M. Rothschild’s recommendation that

<sup>10</sup> Many academic authors, particularly in the knowledge utilisation literature, are concerned with the perceived role and value of social science – e.g. Nutley et al., 2007; Caswill and Lyall 2013; Pacharapha and Ractham, 2012.

<sup>11</sup> E.g. DEFRA, 2003a; DEFRA SAC, 2006.

<sup>12</sup> Walker, 1987, p.154.

social science should be excluded from his 'customer-contractor principle'.<sup>13</sup> The exclusion was premised on his view that the role of social science is to alert policy-makers to issues of concern for debate, rather than to help them in finding solutions to known problems. In this way, influential actors' ideas about the role of social research within the civil service clearly have implications for social research capacity.

Besides the type of civil servant in charge of a department's social research portfolio, we should also consider their status in the organisational hierarchy. Intriguingly, Walker observes that since civil servants typically meet with others in their own grade, advisory roles are commonly played by more senior staff while the research itself is carried out by more junior staff.<sup>14</sup> As such, the way that social research is put to use in the department will depend on how many junior and senior social researchers there are, and whether social research is handled by social researchers or other actors at different points in the organisational hierarchy.

Last, Walker identifies a wide range of reasons to explain why officials sometimes perceived social science to lack value,<sup>15</sup> including: a perception that social scientists are predominantly biased towards the political left and lack professional standards; a "long-running tension" between specialists and generalists; a lack of existing capacity thereby rendering social science research officers unreliable for meeting deadlines, and the risk that policy officials take when commissioning research that might embarrass the minister or that might reveal insights that seem commonsensical. In addition, Walker argues that the dynamics between teams in the same institution can

<sup>13</sup> Rothschild, 1982, p.11. Cited in Walker, 1987, p.153.

<sup>14</sup> Walker, 1987, p.145.

<sup>15</sup> Walker, 1987, p.141.

shape the roles that social research expertise plays in unexpected ways. He finds that the production of research can sometimes be motivated by “sub-departmental interests”,<sup>16</sup> adding that individuals compete for recognition, and that “policy developments in one part of a department are likely to have repercussions elsewhere” – with the consequence that policies often evolve through contestations resulting in changing ‘alliances’ between policy teams in the same department.<sup>17</sup> He even claims that research is occasionally used “to undermine the policy interests and credibility of other divisions” within the same organisation.<sup>18</sup> Clearly then, alongside understanding officials’ perceived meanings and roles of social research, analysing how they perceive its value will provide important empirical insights for explaining changes in research capacity.

The above re-categorisation of Walker’s analysis in terms of perceived meanings, roles, and value provides a strong starting point for exploring how changes in key actors’ ideas about social research can lead to particular changes in social research capacity in DEFRA and DECC – as understood within the context in which policy-makers operate. While nearly thirty years have passed since Walker’s article was published, focusing on social research’s perceived meanings, roles, and value provides a cornerstone of part one of this theoretical framework.

The range of reasons that officials might value social research (or not) demand to be investigated further. We have already seen that generalists may value research for serving surprising functions – for instance to pursue internal ‘sub-departmental interests’. The next two sections are therefore

<sup>16</sup> Walker, 1987, p.156.

<sup>17</sup> Walker, 1987, p.156.

<sup>18</sup> Walker, 1987, p.156.

focused on exploring the reasons that policy officials may find value in social research.

### **3. Valuing Social Research within a Policy Institution (1): Policy Stages and Objectives as Organising Principles**

It was suggested in the previous section that deadlines can shape the type of contribution that social research makes to policy. Here I do not mean that it is simply a matter of producing research at a fast enough pace for it to be used. Rather, deadlines for different activities at different times will frame what sort of research is valued and the reasons why. These deadlines in turn will depend upon how officials see their work in relation to the broader policy-making process, and what their objectives are. As such, officials' interpretations of the policy-making process, and of their objectives, can be understood as organising principles within an institution. How these can shape how social research is valued within an organisation will be considered in this section.

#### **3.1 Policy Stages as Organising Principles**

Policy development has been shown to be more complex and messy than is suggested by models that identify distinct policy stages.<sup>19</sup> Nonetheless, civil servants reportedly find the idea of stages useful for the purposes of arranging action and resources which in turn shape actors' appreciation of different forms of knowledge at different times.<sup>20</sup> Following Nutley et al., it is

<sup>19</sup> Colebatch, 2005, p.19.

<sup>20</sup> Daniell et al., 2016, p.3.

helpful to distinguish between four policy stages with respect to how the contribution of social research may be valued at each of these points in time.<sup>21</sup> These four stages are: problem identification and agenda setting, decision making, policy implementation, and policy evaluation.

In the problem identification and agenda setting stage, policy-makers (either explicitly or implicitly) select the problems they will address and how they will be framed within the policy-making context. Research at this stage can elucidate stakeholders' views on the important issues and the reasons why the issues should be addressed.

But the inclusion of academic insights at this stage will depend on the process by which ideas emerge onto the policy agenda. John Kingdon's concept of a 'policy window' captures the time during which ideas may have particularly strong salience and be picked up by policy-makers.<sup>22</sup> He argues that policy windows arise when three metaphorical 'streams' interact. The political stream refers to political events, such as a change of government or the rise of public concerns on politicians' agenda.<sup>23</sup> The policy stream refers to the supply of policy ideas that exist in policy networks, and which may not even be associated with a particular problem that government seeks to address.<sup>24</sup> The third stream, the problem stream, refers to the range of problems that government actors seek to address.<sup>25</sup> Kingdon emphasises that these streams can co-exist independently, and occasionally they align such that an opportunity arises for ideas to be developed into a policy programme. Thus, to understand how research insights might inform policy

<sup>21</sup> Nutley et al., 2007, p.93.

<sup>22</sup> Kingdon, 1995, p.165.

<sup>23</sup> Kingdon, 1995, p.145.

<sup>24</sup> Kingdon, 1995, p.116.

<sup>25</sup> Kingdon, 1995, p.90.

ideas, we must pay attention to the emergence of policy options prior to their arrival at the minister's desk.

After the problem identification and agenda setting stage comes the decision-making stage, where policy-makers identify courses of action for addressing the identified issues and choose amongst them – taking into account the strengths, weaknesses, opportunities, and threats associated with each. Expert advisors can help at this stage to evaluate the range of policy options available, to analyse how best to implement actions, and also to aid in thinking ahead for monitoring and evaluation plans.

Then, in the policy implementation stage, the officials seek to deliver their proposed outcomes. Researchers might be called in to contribute towards understanding and overcoming any issues faced at this stage.

Academic social scientists whose work has relevance in technical policy areas have complained that policy-makers often see the implementation stage as the earliest appropriate point at which to engage with social research. According to what has been termed the 'end-of-pipe' model,<sup>26</sup> natural scientists, engineers, and economists are enrolled first to define a problem and assess the cost-effectiveness of solutions, before social scientists are brought in to make the implementation of that idea as smooth as possible by securing public acceptance or engagement. These researchers argue that social science should not just be used in the implementation stage but earlier, to help define the problem.

Last, after the policy has gone 'live', Nutley and colleagues claim that officials should monitor the effectiveness of the policy and its implementation, and evaluate what lessons could be gleaned for future

<sup>26</sup> Lowe et al., 2008, p.230.

reference.<sup>27</sup> Research might be carried out for these purposes and then utilised when considering problems and agendas again at a later occasion – although Aaron Wildavsky observes that government officials may not always be interested in evaluating their policies.<sup>28</sup> For instance, they may be cautious of evaluating a project which is seen as valuable to key stakeholders, in case findings suggest that the scheme is not effective. Assuming that an evaluation does occur, the officials will gain lessons to take forward for the next time they are in the problem identification and agenda setting stage.

Clearly then, policy-makers’ appreciation of particular types of research input will vary according to the stage of development they consider a policy to be in, and what is deemed appropriate at that stage by key actors.

### 3.2 Objectives as Organising Principles

The previous subsection implicitly took for granted that officials organise their research activities around a straightforward interest to use outputs for the purposes of instrumentally improving policy outcomes. This is consistent with much of the literature on research utilisation. As Christina Boswell notes: “theories of the role of knowledge, research and ideas in policymaking are almost without exception premised on the notion that knowledge is valued as a means of advancing certain rational organizational goals”.<sup>29</sup> However, her empirical analysis reveals that this assumption is problematic. Pointing to a discrepancy between the UK Government’s considerable

<sup>27</sup> Nutley et al., 2007, p.93.

<sup>28</sup> Wildavsky, 1987, p.213.

<sup>29</sup> Boswell, 2009, p.30.

attention to (and investment in) expertise during the first decade of the twentieth century on the one hand, and their resulting utilisation of knowledge (particularly social science)<sup>30</sup> on the other, she argues that this discrepancy makes sense if we acknowledge that, under different conditions, social and institutional drivers rather than rationalistic drivers might be dominant. This observation is consistent with Walker's point about sub-departmental interests shaping policy-makers' engagement with research.

Boswell draws a distinction between two ways that government agencies might use expert knowledge: 'instrumentally' and 'symbolically'. 'Instrumental uses' are those in which knowledge is applied to aid an organisation to achieve better outcomes or to improve their processes.<sup>31</sup> In contrast, Boswell defines two forms of 'symbolic' uses of knowledge,<sup>32</sup> where research is not intended to change outcomes or processes but rather to strategically bolster the organisation's position.

One type of 'symbolic' application occurs when research is used to provide additional reasons for supporting a previously chosen course of action. Boswell refers to this as a 'substantiating' use of knowledge.<sup>33</sup> The other type of symbolic function is termed 'legitimizing'. This occurs when expert findings are invoked with the intention of nothing more than to bestow legitimacy for government's ability to make decisions. In such cases, the bulk

<sup>30</sup> Boswell, 2009, p.30.

<sup>31</sup> Boswell, 2009, p.29. Note that in contrast to other accounts in the policy studies literature, Boswell does not specify that research is applied 'directly' (c.f. Nutley et al., 2007, p.36) or 'in pursuit of a given objective' (c.f. Owens, 2015, p.10). The means by which research comes to be applied to alter an organisation's outputs or processes are not specified by Boswell. It simply matters that such changes occur. Hence, the different modes of influence that those authors (and others) contrast against what they define as instrumental use (discussed in Section 7 of this chapter), can all be subsumed under Boswell's category of instrumental research use.

<sup>32</sup> Boswell, 2009, p.61.

<sup>33</sup> Boswell, 2009, p.62.



of the evidence need not be aligned with the chosen course of action. Rather, governments can benefit from doing nothing more than being seen as *engaging* with the research. This enables policy-makers to show that the ministers are taking some sort of action on the issue, and may even enable them to “shelve an uncomfortable political issue in the hope that it will go away”, as Walker has put it.<sup>34</sup>

From an STS perspective, the distinction between instrumental and symbolic uses of knowledge is problematic, since it is often shown that instrumental uses of research simultaneously perform a symbolic function, in bestowing legitimacy upon particular actors and their arguments.<sup>35</sup> We can therefore expect to find that instrumental and symbolic rationales may be at play. Nonetheless, the distinction is useful for Boswell’s key claim, which is that by understanding the symbolic types of knowledge utilisation we can better make sense of the apparent disjuncture between government investment and apparent interest in evidence-based policy on the one hand, and the persistent disregard of research findings on the other hand.<sup>36</sup>

Boswell goes on to suggest conditions under which different organisations may be inclined towards one of the three different uses of expert knowledge. Starting from the perspective that policy-makers are fundamentally concerned with the perceived legitimacy of their organisation, Boswell points out that they have two options for strengthening this, as they can improve either outcomes or processes. In situations where an organisation perceives that there is pressure from stakeholders to change their output, also believes

<sup>34</sup> Walker, 1987, p.155. For a similar point with respect to the creation of expert committees as a means for being seen to be taking action, see Owens, 2015, p.8.

<sup>35</sup> Jasanoff, 1990, p.78; Gieryn, 1983.

<sup>36</sup> Boswell, 2009, p.30.

that a change can be successfully delivered,<sup>37</sup> and furthermore, accepts that there is a gap in knowledge for which research could aid the delivery of new outcomes,<sup>38</sup> then, Boswell argues, the organisation is more likely to intend to use expert knowledge instrumentally. If, however, actors in an organisation perceive that significant stakeholders consider the evidence to be more disputed than they do, then they are more likely to value knowledge for its legitimising function, and use it in this way.<sup>39</sup> Last, if working in a contested policy landscape where an organisation and its stakeholders both believe that more evidence will settle the causes of contestation, then the organisation is more likely to seek out knowledge to substantiate a predetermined course of action.

From Boswell's account we conclude that the reasons that actors value knowledge within an organisation can depend on how they believe the organisation's work is perceived by key stakeholders, and whether they think that there is value in utilising social research expertise with regards to improving the organisation's standing. A government department's interest in – and attempts to improve – the use of research is therefore likely to change in accordance with changes in how they value the research and how they act in response to signals from their surroundings. Boswell thus offers a useful means of conceptualising how and when actors in government departments might value expertise.

We can also expect these motivations to differ between actors within the same organisation. By observing cases in the UK, the European Union, and Germany, she notes that actors within the same policy institution sometimes

<sup>37</sup> Boswell, 2009, p.49.

<sup>38</sup> Boswell, 2009, p.56.

<sup>39</sup> Boswell, 2009, p.82.

hold divergent views on the roles of expertise.<sup>40</sup> Boswell’s empirical analysis thereby reveals a glimpse of the epistemic diversity that can be sustained within an institution. She shows that while some officials value research for serving an instrumental purpose, others do so for symbolic reasons. But Boswell does not probe into how differences in motivations are associated with the type of official in a department – i.e. whether they are generalists or specialists. Even if we assume that both sets of actors see value in the use of evidence for securing credibility for policies, these actors are likely to seek credibility from different stakeholders. We can expect policy officials to be concerned with satisfying ministers and balancing the demands of stakeholders, while specialists will be more likely to prioritise the perspectives of their academic or industry counterparts. It follows that they might have different reasons for engaging with research: specialists will perhaps be more concerned with using research instrumentally to help decide policy outcomes, while we can expect generalists to be more interested in securing credibility for an idea with less concern about whether this is achieved through instrumental or symbolic engagement with researchers. In as far as it is possible to infer actors’ motivations for engaging with social research from interview data and documents, Boswell’s categorisation will be useful for understanding how social research capacity has changed in DEFRA and DECC.

Philip Gummett’s account of the history of expert natural science advisors within the UK Government, published in 1980,<sup>41</sup> is more revealing than Boswell’s in terms of understanding how differences in analysts’ and generalists’ objectives can play out in internal tensions over the role and

<sup>40</sup> Boswell, 2009, p.217-8.

<sup>41</sup> Gummett, 1980.

status of scientists, and the implications this can have for research capacity. The lower status of scientists in Whitehall was historically rationalised on the grounds that generalists had greater ‘adaptability’<sup>42</sup> and would more likely exercise balance in listening to scientific advice alongside other political, legal, and budgetary imperatives.<sup>43</sup> This translated into significant pay differences between scientists and administrators of similar grades, with the generalists benefiting from greater chances of promotion. More significantly for our purposes though, Gummatt argues that this difference in status also had epistemic consequences within the hierarchical civil service, as scientists would complain that policy officials would not ask for scientists’ advice in making decisions where science could contribute.<sup>44</sup> He shows that between the 1920s and late 1970s, scientists continually fought against differences in status and grading.<sup>45</sup> Although steps have been taken towards remedying this<sup>46</sup> – particularly with the implementation of recommendations from reports by Lord Fulton (1968)<sup>47</sup> and Lord Rothschild (1971)<sup>48</sup> – the concern that a scientist’s specialisation can restrict one’s chances of promotion remains in the civil service today.<sup>49</sup> By analogy, we can expect to find that social researchers will be more motivated to pursue opportunities for instrumental research utilisation than their policy colleagues, and also expect that the resolution of conflicts between these actors will be important in shaping how research capacity is built in an organisation.

<sup>42</sup> Gummatt, 1980, p.76.

<sup>43</sup> Gummatt, 1980, p.76.

<sup>44</sup> Gummatt, 1980, p.75.

<sup>45</sup> Gummatt, 1980, p.71.

<sup>46</sup> Gummatt, 1980, p.82.

<sup>47</sup> HM Government, 1968.

<sup>48</sup> HM Government, 1971.

<sup>49</sup> Government Office for Science, 2013.

To summarise this subsection then, it is clear from Boswell and Gummett’s accounts that government departments may host divergent institutional objectives and epistemic perspectives, and the interactions between different actors therefore shape how particular forms of evidence are valued. Social research will therefore be valued differently for its potential to serve particular functions according to the given circumstances. Of course, civil servants’ perceptions of the value of research are also susceptible to the views of the politicians they serve. The next section considers how incumbent politicians may influence key actors’ perceptions of the value of social research within DEFRA and DECC.

#### **4. Valuing Social Research within a Policy Institution (2): Perceived Credibility of Social Research**

Having seen how internal organisational drivers can shape civil servants’ appreciation for social research, we must also examine how politicians’ perspectives on the credibility of the social sciences can shape the epistemic context within a government agency. This section explores that issue by means of a contextualised history of the social sciences since the Second World War.

Between the 1940s and mid-1960s in Britain there was prevailing support for centralised state planning for the benefit of society.<sup>50</sup> In this context, social science was seen as offering promise for providing solutions for social problems – and more attention and resources began to be devoted to the field’s development than had been previously. But even then, politicians and natural scientists questioned whether the social sciences were on firm

<sup>50</sup> King, 1997, p.1.

enough epistemological grounds to warrant government support and utilisation. Many senior Labour and Conservative ministers treated social science with scepticism - including Labour's Herbert Morrison and the Conservative's Lord Hailsham, who both held the post of Lord President of the Council and therefore held responsibility for research funding. The latter claimed that social science was a "happy hunting ground for the bogus and meretricious".<sup>51</sup>

The formation of a Social Science Research Council (SSRC) in 1965 did come with greater recognition for ("a firmly positivist conception of")<sup>52</sup> social science research.<sup>53</sup> But this did not bring an end to politicians and others expressing qualms over the legitimacy of particular kinds of social science. This continued till the end of the twentieth century<sup>54</sup> and, we might expect, such views may still linger in DEFRA and DECC during the period under consideration here.

Nonetheless, with the support of a SSRC, between 1966 and 1984 government departments' inflation-adjusted expenditure on social science research grew approximately three-fold.<sup>55</sup> This period also saw a growth in the number of social science research officers employed by government departments, peaking in 1979 before reductions in departmental budgets saw a decline in staff numbers. But these cuts were not uniformly distributed. Robert Walker shows that while in 1975 social science research officers outnumbered economists across Whitehall, a shift took place under Margaret

<sup>51</sup> ESRC, 2005, p.6.

<sup>52</sup> King, 1997, p.21.

<sup>53</sup> King, 1997.

<sup>54</sup> Walker, 1987, p.148.

<sup>55</sup> Walker, 1987, p.146.

Thatcher’s Government such that by 1983 the reverse was true.<sup>56</sup> This was at a time when the incumbent Conservative ministers viewed non-economic social science as politically aligned with a centralised planning agenda, which they opposed.<sup>57</sup> Moreover, Walker recounts that ministers “became noticeably more involved in commissioning and vetoing research than had traditionally been the case”.<sup>58</sup> According to a recent survey this matter of departments ‘leaning’ on contracted researchers appears to remain an issue today,<sup>59</sup> although Edward Page and colleagues claim that this is less common when a ‘research officer’ (such as a social researcher) is managing the project.

It is clear from this section so far that civil servants’ attribution of value to social science and to social scientists depends heavily upon the perceived credibility of social science. Doubts raised by politicians and influential actors have been effective in restraining the growth of social science expertise in government in the latter half of the twentieth century.

Although Tony Blair’s Government was no more committed to a state planning agenda than its predecessors were, the Labour Government of 1997-2010 expressed strong commitments to using social science in policy-making processes.<sup>60</sup> Since this is the time period in which DEFRA and DECC were both formed, let us examine it in more detail.

In 2000, David Blunkett envisioned social science making a significant contribution to policy-making processes:

Social science should be at the heart of policy making. We need a revolution in relations between government and the social research community – we need social

<sup>56</sup> Walker, 1987, p.147.

<sup>57</sup> King, 1997, p.24.

<sup>58</sup> Walker, 1987, p.148.

<sup>59</sup> LSE Group GV314, 2014, p.234.

<sup>60</sup> Nutley et al., 2007, p.10.

scientists to help to determine what works and why, and what types of policy initiatives are likely to be most effective (Blunkett, 2000).<sup>61</sup>

It is worth noting that a particular conception of what social research is and how it can contribute to policy-making is being invoked here. The phrase “what works and why”, notably suggests a role for social research *early* in the construction of policy ideas, rather than a tool to improve the effectiveness of a pre-determined policy initiative. Moreover, on Blunkett’s account social research is valued as an instrument for achieving more effective policy designs for realising pre-existing aims, as opposed to a means by which one can understand public views and use them as a basis for framing policy problems (as per the arguments made by STS researchers discussed in the introduction).

The Labour Government introduced a range of measures to promote ‘better’ policy-making, all with a view to improving the “relevance, availability, credibility, and user-friendliness”<sup>62</sup> of research findings for policy officials.<sup>63</sup> These included greater investment in the Economic and Social Research Council, new initiatives to manage knowledge and to improve its communication, efforts to improve how research and evaluation studies are commissioned within the civil service, the professionalisation of a Government Social Research Service within the Cabinet Office, and reforms to civil service working practices.

Little has been written so far on whether the 2010-2015 Coalition Government maintained a similar commitment to using evidence in policy-making. Some authors claim that the relationship between social science and

<sup>61</sup> As described in Nutley et al., 2007, p.10.

<sup>62</sup> Nutley et al., 2007, p.239.

<sup>63</sup> Nutley et al., 2007, p.233ff.



policy actors “deteriorated”<sup>64</sup> over this time, due to new government pressure on research councils and an apparent lack of interest in funding research within government. Yet, other authors have suggested appreciation was sustained, albeit in a financially constrained context.<sup>65</sup> The creation of a Behavioural Insights Team in the Cabinet Office was described by one author as indicative of the administration’s commitment to using behavioural sciences – a particular form of social research – in the development of policy.<sup>66</sup> In any case we are likely to find some variation, and it will be important to pay attention to politicians’ statements with regards to the value of social research as we can expect these to have some influence over the social research capacity in DEFRA and DECC. Since the incumbent ministers are the most important stakeholders for a government department, their speeches and commitments provide officials with a reason (to be seen) to be valuing social research expertise. Hence, in a context where ministers emphasise the use of social research for better policy-making, a department is likely to believe that being seen to engage with social research would bolster the department’s legitimacy in the eyes of politicians.

Clearly then, this section has highlighted that any history of social research capacity within DEFRA and DECC must pay attention to what happens outside and around the departments as well as within it. Of course, institutional and political contextual factors are also *epistemic*, in that they relate to the perceived credibility of particular types of social scientific knowledge. This was explicitly the case in Lord Hailsham’s quotation above in which he questioned the value of social science, just as it was in David

<sup>64</sup> Brewer, 2013, p.166; See also Tarling, 2011.

<sup>65</sup> Talbot and Talbot, 2015.

<sup>66</sup> John, 2014.

Blunkett's words which presented social science as valuable to policy-makers. For completion then, a framework for understanding social research capacity within a civil service institution must pay attention to the institutional, political, *and epistemic* circumstances that shape key actors' perceptions of the value of social research.

So far, so good. But what is missing from this framework is an appreciation of the *process* by which new perceptions of the meanings, roles, and value in social research emerge. It is in interactions, STS authors argue, that expertise is constructed.<sup>67</sup> Hence, understanding social researchers' interactions and experiences is vital if we are to understand their history.<sup>68</sup> A close inspection of the interactions between actors and the roles that these have will be important in understanding the shaping of DEFRA and DECC's research capacity. The next section fills in this final gap in the theoretical framework by focusing on interactions and learning.

## 5. Learning About Social Research Through Interactions

The observation in the introduction to this thesis that some actors in DEFRA and DECC have been interested in social research capacity suggests that some learning must be taking place within the departments – learning about specific forms of social research, what they contribute, and why their contribution could be valuable to a given organisation. It is useful to refer to this as learning *about* social research, as opposed to learning *from* social research, which is the focus of the latter two research questions. Considering the means by which civil servants learn *about* social research will enable us to

<sup>67</sup> Jasanoff, 1990; Gieryn, 1983.

<sup>68</sup> Parry and Murphy, 2013.

better understand the processes by which capacity for social research is developed, while exploring the circumstances around how they learn *from* social research will go some way to explaining the influence of social researchers within these organisations. This is not to say that the processes by which people learn about social research are necessarily distinct from those by which they learn from social research – both may be achieved through involvement in the commissioning of a research project, for example. Rather, the distinction is useful for the purposes of addressing the different aspects of the history of social research in DEFRA and DECC.

Three general points can be drawn from the literature on learning. First, following Hugh Heclo<sup>69</sup> (and many policy researchers since)<sup>70</sup> we can see learning as a core aspect of what policy-makers do. These authors argue that learning is to be treated as separate from (but causally intertwined with) power dynamics between stakeholders.

Second, learning can be understood as a social process. To this end, it is shaped by the social interactions between actors. It has been argued that it may be easier to learn from friends,<sup>71</sup> suggesting that the building of a rapport between actors will be important. But this is not to say that learning is never an adversarial process. Arie Rip has suggested the concept of “agonistic learning” to highlight what he describes as the importance of learning through disagreements as a means of producing ‘robust outcomes’.<sup>72</sup> Whether UK policy-makers learn in agonistic contexts is an open question, and is to be explored in this thesis. The existing literature appears to take it for granted that policy learning through critical engagement is unlikely. For

<sup>69</sup> Heclo, 1974.

<sup>70</sup> See Owens, 2015, p.10, for a neat overview.

<sup>71</sup> Freeman, 2006, p.376.

<sup>72</sup> Rip, 2003, p.425.

instance, Huw Davies et al. claim that “the more challenging the research ideas, the more readily such research may be dismissed, misunderstood, misconstrued or misappropriated [by policy-makers]”.<sup>73</sup> This view resonates with Nigel Norris’s dated yet still cited claim that “criticism is a problem” for civil servants.<sup>74</sup> Intriguingly, no studies to date have mentioned the emergence or operationalisation of government analysts’ ‘challenge function’, which we saw in the introduction to this thesis. As such, examining whether the challenge function is conducive to agonistic learning about – and from – social research will be an important contribution of this thesis.

Learning is also said to be contingent on the circumstances in which interactions take place. The process of translating ideas from elsewhere is transformative – information and ideas are often shaped by the contexts in which they are put to use. Political influences, the views of experts, and policy-makers’ values are all said to influence the translation process.<sup>75</sup> To these, Richard Freeman adds that what actors know will be shaped by what they already know.<sup>76</sup> In this sense, prior understandings can be limiting for future learning.

In summary, we can expect civil servants to learn about social research through interactions with particular actors, and that this process will be shaped by the contexts in which these interactions take place. To address the first two research questions then, we must be attentive to the interactions that take place, and the contexts in which they do so.

<sup>73</sup> Davies et al., 2007, p.233.

<sup>74</sup> Norris, 1995, p.274. The claim is uncritically cited in a recent article: LSE Group GV314, 2014, p.227.

<sup>75</sup> Freeman, 2006, p.376, citing Rose, 1993.

<sup>76</sup> Freeman, 2006, p.382.

*“Challenge and Be Challenged”*

But we should not presume that external researchers simply impart their knowledge on civil servants as if they are ‘speaking truth to power’.<sup>77</sup> Collingridge and Reeve, for instance, have highlighted how the bringing together of policy actors and researchers can result in new domains being defined, new questions being valued and new roles identified for experts.<sup>78</sup>

Moreover, Michael Gibbons and colleagues’ notion of the new production of knowledge suggests that there may be something distinctive about the fact that social researchers are situated within what they refer to as the “context of application”.<sup>79</sup> They argue that research is conventionally conducted in academic institutions, where researchers enjoy a defined disciplinary focus, homogeneity in perspectives, autonomy over their subject matter and strict processes of quality assurance (such as peer review). By contrast, Gibbons and colleagues define ‘mode 2’ knowledge production as occurring within the context of *application*. In such contexts, they claim, actors’ concerns are ‘transdisciplinary’ (i.e. concerned with problems that are defined by practitioners rather than by academic researchers),<sup>80</sup> a heterogeneous set of skills within and outwith government are brought together to solve problems,<sup>81</sup> actors exhibit a greater degree of reflexivity or social accountability than academic researchers,<sup>82</sup> and quality is determined not by strict peer review processes but by taking into account a broad variety of indicators – including the quality of the output for the intended purposes.<sup>83</sup> It is important, then, to bear in mind that the production and use of research

<sup>77</sup> Wildavsky, 1987.

<sup>78</sup> Collingridge and Reeve, 1986, p.35.

<sup>79</sup> Gibbons et al., 1994, p.3.

<sup>80</sup> Gibbons et al., 1994, p.4.

<sup>81</sup> Gibbons et al., 1994, p.6.

<sup>82</sup> Gibbons et al., 1994, p.7.

<sup>83</sup> Gibbons et al., 1994, p.33.

within DEFRA and DECC will likely differ from an academic institution – although it remains to be seen empirically what key features of the context actors deem important for accounting for the histories of social research capacity in these departments.

Keeping with the view that we must understand the social context in which knowledge is produced and applied, Sheila Jasanoff has developed the non-determinist idiom of co-production to highlight how changes in the production and/or uptake of knowledge often coincide with changes in social order.<sup>84</sup> Eschewing accounts that place too strong an emphasis on the role of knowledge in determining the formation and maintenance of social structures on the one hand, and accounts that treat knowledge as fully accounted for by social factors on the other, Jasanoff emphasises that in some sites, knowledge and social order can be said to be co-produced. In particular, she argues that analysts should expect to find that the mobilisation of knowledge in political settings often coincides with important changes in actors' identities, institutions, discourses, and representations. By considering these changes, we can observe how new perceptions of the meanings, roles, and values in social research are constructed and sustained, and therefore how the idea of social research gains legitimacy and traction within DEFRA and DECC.

STS accounts such as those of Jasanoff, Collingridge and Reeve, and Thomas Gieryn,<sup>85</sup> amongst others, bring into question the possibility of drawing an incontestable line of demarcation between experts and policy-makers. Viewing any such demarcation as the result of judgements taking into

<sup>84</sup> Jasanoff, 2004, pp.39-45.

<sup>85</sup> Gieryn, 1983.

account actors’ interests and the strains they face,<sup>86</sup> Sheila Jasanoff argues that a constructed distinction between experts and policy-makers enables each to claim legitimacy.<sup>87</sup> Therefore, in paying close attention to the processes in which social research capacity is shaped, we should not be surprised to find experts engaged in political roles, and likewise policy-makers involved in epistemic matters.

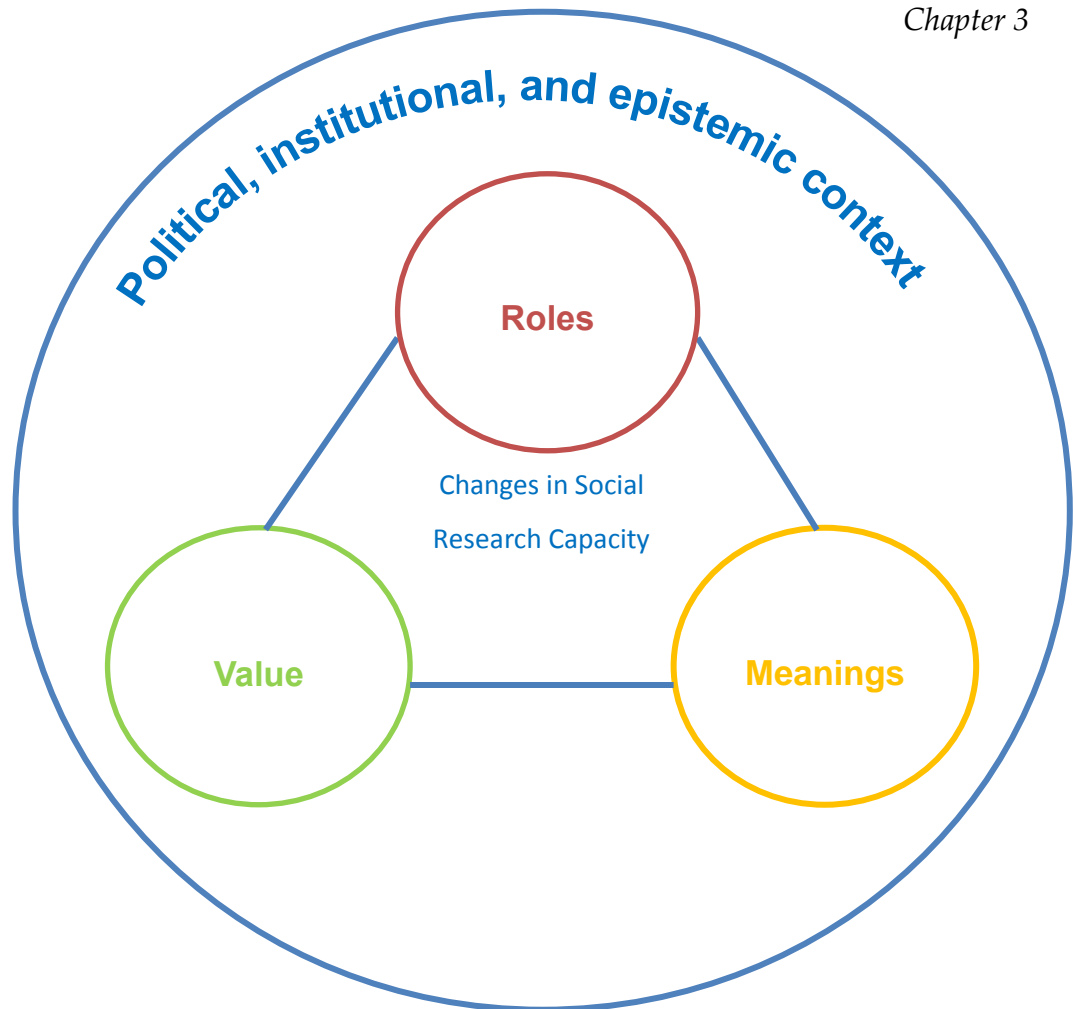
This section has highlighted the importance of paying attention to processes of learning *about* social research, as these are likely to inform the form of a department’s social research capacity and the means by which it is developed. This section has thereby emphasised the importance of understanding interactions, and the contexts which shape those interactions, for the purposes of understanding processes of learning about social research.

With the last piece of the puzzle in place, the full theoretical framework for understanding changes in DEFRA and DECC’s capacity for social research emerges. Drawing on the range of literature analysed so far in this chapter, I argue changes in capacity must be understood through a close examination of the processes by which internal actors’ perceptions of the meanings, roles, and value of social research change. We have seen that these perceptions are likely to be shaped through interactions and collaboration, and must be situated within the institutional, political, and epistemic contexts in which the actors operate.

It is with this framework, summarised graphically in Figure 1 below, that I approach the following two research questions. These guide the analysis in Chapter 4 (about DEFRA) and Chapter 5 (about DECC).

<sup>86</sup> Gieryn, 1983.

<sup>87</sup> Jasanoff, 1990, p.236.



**Figure 1: A Graphical Illustration of the Theoretical Framework for Understanding Changes in Social Research Capacity in Policy Institutions**

Research Question 1: *How has DEFRA's internal capacity for utilising social research changed since it was formed in 2001?*

Research Question 2: *How has DECC's internal capacity for utilising social research changed since it was formed in 2008?*

This theoretical framework is a novel contribution, and as such has never been applied. However, it can be tested through application in historical examples. The next section does this by applying the framework to two cases.



## **6. Testing Part One of the Framework: Histories of the Institutionalisation of Novel Forms of Expertise in UK Government**

Perhaps for reasons associated with difficulty of access, historical accounts of natural science expertise in the civil service reveal more than contemporary STS studies do about the epistemic context in which officials work. Indeed Andrew Webster identified this as a gap in the STS literature nearly ten years ago:

I would also suggest that an important task that STS needs to undertake to make [policy] engagement more effective is a detailed analysis of the epistemic culture found within the social world of science policy making: what forms of knowledge do members of the scientific civil service treat as reliable and robust and how are these performed through the informal and formal institutions of government? An understanding of this civil service episteme and the assumptions on which it is based would provide an invaluable insight into the policy production process, its management of science and its own attempts to simplify or "purify" science as an object for policy making. This would help the STS analyst develop a credible critique of policy from within and not simply outside of the policy arena.<sup>88</sup>

A key theoretical contribution from this thesis then is a deeper understanding of the epistemic context within DEFRA and DECC and how it changes.

Given the absence of recent accounts of the experiences of analysts within government, we can instead use historical accounts to test the theoretical framework presented here. Particularly intriguing for our purposes are studies of natural scientists within government departments at a time when their expertise was afforded lower status than it is today. Two examples are drawn upon: historical analyses of the role of the Chief Medical Officer

<sup>88</sup> Webster, 2007b, p.474.

within the Ministry of Health and its successors,<sup>89</sup> and Sabine Clarke's history of the Colonial Office's Colonial Research Committee.<sup>90</sup> In these cases the government's capacity to use scientific research is at stake, although the actors and analysts do not put the issue in these terms. For these reasons they are valuable case studies.

According to Martin Gorsky's research, the idea of creating the civil service's first Chief Medical Officer in 1855 has its roots in a particular interpretation of medical expertise in terms of its ability to explain the spread of disease at a time when politicians were concerned about the sanitary conditions of British workers.<sup>91</sup> This interpretation of medical expertise afforded a particular function: to help in the development of policies to tackle sanitary conditions in cities. But as Gorsky notes, the Chief Medical Officer's duties gradually expanded over the years, with new roles emerging. At first these duties were for the purposes of monitoring the state of sanitary conditions, but gradually as academic research developed, new interpretations of medical expertise took hold. This included bacteriological analysis, which in turn provided further functions for medical expertise, in terms of not only preventative but also curative contributions. With changes in interpretations of medical expertise, came new opportunities for the Chief Medical Officer to contribute, and this in turn afforded a growth in the number of medically trained experts employed by the ministry.

Sally Sheard's account adds to this story by highlighting tensions and changes in the perceived value of medical expertise from the time the first Chief Medical Officer was appointed in 1855, up to the Second World War.

<sup>89</sup> Sheard, 2010; Gorsky, 2007.

<sup>90</sup> Clarke, 2007.

<sup>91</sup> Gorsky, 2007, p.468.

*“Challenge and Be Challenged”*

She argues that throughout this time the incumbents in those posts were “engaged in an almost continuous battle to gain and maintain sufficient medical staff to carry out their duties”. A key issue, she finds, was civil servants’ lack of appreciation for experts’ judgements as a basis for supporting policy decisions and procedures. A quotation by Arthur Newsholme, who held the post in the 1910s, reveals two types of tension that he encountered:

[First,] an honest belief, common to many government departments, that technical advice is advice not to be given until called for by the secretariat who, it is assumed, are entirely competent to decide whether such advice is needed. Second, when such advice is on record, it is assumed that it can be safely reapplied in what are regarded by the secretariat as analogous circumstances. (Newsholme 1936: 62)<sup>92</sup>

Sheard goes on to show that the establishment and subsequent growth of the National Health Service after the Second World War engendered greater recognition of medical experts’ value and afforded them more influence within the Ministry of Health (and its successor departments). The Chief Medical Officer also successfully argued to retain line management of the medical staff, for fear that they might otherwise not be valued enough to contribute effectively. Yet, the function that the medical experts served in the department continued to be contested by politicians as well as by civil servants. And the extent of their contribution was constantly undermined by cuts to the medical profession – which the Chief Medical Officer was powerless to stop.<sup>93</sup>

From Gorsky and Sheard’s accounts then, we can see that new roles for research may emerge as new interpretations of expertise are constructed.

<sup>92</sup> Quoted by Sheard, 2010, p.194.

<sup>93</sup> Sheard, 2010.

Moreover, while some internal actors will value their contribution, there may well be sustained contestation from others. We can infer that within government departments like DEFRA and DECC, we should expect to find tensions and contestations over the role and value of social research expertise. We might also find that amid constraints to budgets or other threats, those who support the growth of social research expertise will seek to exert their influence to protect or strengthen social researchers' positions within departmental staff hierarchies.

As a second historical application of our framework, consider Sabine Clarke's analysis of the formation of a Colonial Research Committee by the Colonial Office, in the 1940s. The committee was to contribute expertise on "colonial environments and societies", for specific purposes with regards to improving the effectiveness of plans to tackle disease control and strengthen crop growth in those contexts.<sup>94</sup> The case for a Colonial Research Committee was won, Clarke argues, in part because of the support of high profile and respected voices such as the Lord Hailey, but also because the issue was raised just at the time that reforms were being conducted in development policy and so a new committee offered a means by which the Colonial Office could address some of their own prior concerns associated with colonial research activities.<sup>95</sup> On Clarke's account, these social and political circumstances affected how the policy-makers valued the decision to develop a Colonial Research Committee. In turn, the Colonial Research Committee successfully campaigned for colonial research institutes to have the autonomy to conduct long-term, generalizable research, although in 1952 the

<sup>94</sup> Clarke, 2007, p.458.

<sup>95</sup> Clarke, 2007, p.463.

Colonial Office sought to direct those research institutes to tackle practical problems to aid development in the colonies.<sup>96</sup>

Sabine Clarke’s study highlights the messiness and context-dependence of policy processes. She shows that experts’ attempts to convince senior officials to appreciate the value of a particular form of expertise might involve actors enrolling the support of more senior departments or individuals. Clarke also brings attention to the importance of timing – and ‘windows of opportunity’ in particular – in the policy process, as recognised by Kingdon.<sup>97</sup> This serves as an instructive reminder that we should not expect policy design and delivery to be linear or rational – but rather messy, complex, and shaped by the broader political and institutional context. If new resources are allocated towards the development of social research capacity, then we should seek to understand the means by which these are won, as well as the purposes to which they are to be deployed.

Applying the theoretical framework developed in this chapter to these two historical cases suggests that it provides a fruitful heuristic tool for exploring how social research capacity changes in DEFRA and DECC. Before we apply this in Chapters 4 & 5, we must first explore additional concepts and literature that underpin the second set of empirical chapters. There our concern will be with understanding the circumstances in which social researchers achieve influence in DEFRA and DECC.

<sup>96</sup> Clarke, 2007, p.478.

<sup>97</sup> Kingdon, 1995, p.165.

## 7. Part Two: Understanding Social Researchers' Influence

We can expect that the circumstances in which policy actors learn *about* social research will also affect how they learn *from* social research. As such, the concepts in the previous sections will be important for understanding how social researchers have influenced policy work in DEFRA and DECC. But before we begin to examine this, we need to supplement part one of the framework with two more sets of theoretical concepts. The first set relates to the types of learning *from* social science that can occur in a policy organisation. The second draws on Susan Owens's application of those types of learning as part of a categorisation of the different forms of influence that experts may achieve.

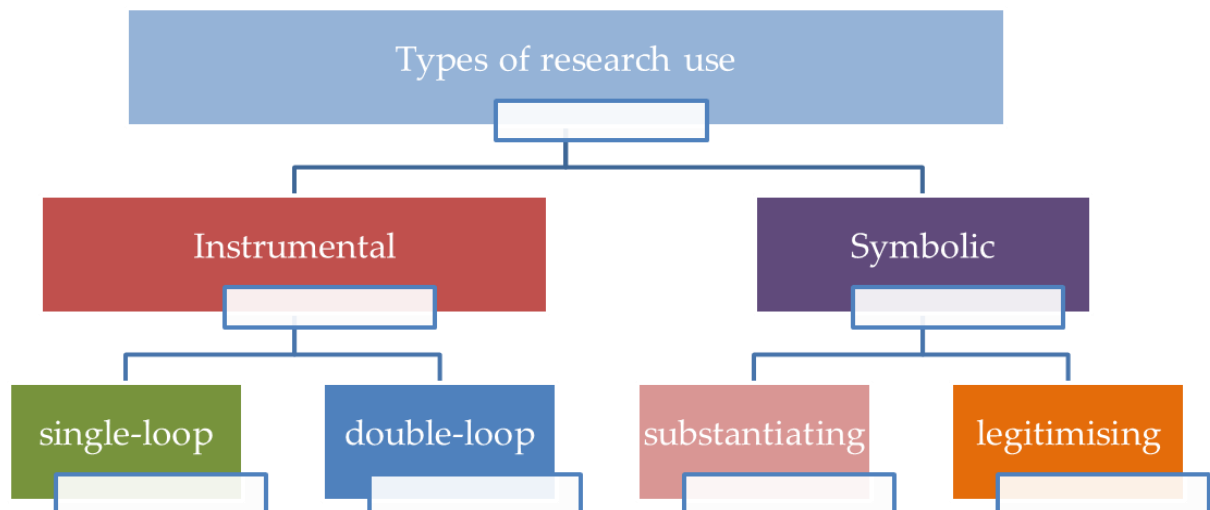
### 7.1 Types of Learning

We saw in Subsection 3.2 that policy-makers may value research for 'instrumental' reasons – i.e. for its potential to inform a decision – or for 'symbolic' reasons – to bolster their perceived credibility. A further distinction can be drawn between types of learning associated with 'instrumental' reasons for using research. The first type of learning occurs when insights are used to address a pre-defined problem.<sup>98</sup> This might involve policy actors using a research project (or a public participation exercise) that is predicated upon policy actors' problem definitions, and is used to address a particular issue within an agreed policy or research framing. The second mode of learning, by contrast, involves using insights to

<sup>98</sup> Argyris and Schön, 1978, pp.18-26.

rethink how a given research or policy issue should be framed in the first place. This involves a challenge to policy-makers’ assumptions and understandings of a problem, such that it is conceived differently. This then opens opportunities for novel ideas and approaches to be deliberated, and may make previous options seem redundant.<sup>99</sup> It is this sort of learning that can give rise to more fundamental policy change.

Susan Owens notes that within different literatures these two forms of learning have been termed ‘simple’ and ‘complex’, ‘instrumental’ and ‘social’, ‘instrumental’ and ‘reflexive’, ‘technical’ and ‘conceptual’ or ‘single-loop’ and double-loop’.<sup>100</sup> In this thesis the terms ‘single-loop’ and ‘double-loop’ are preferred. As such, single-loop learning occurs when research is used instrumentally to solve a set problem, while double-loop learning refers to situations where research is used to reframe the given problem. We can summarise the types of instrumental and symbolic uses of research as in the diagram below.



**Figure 2: Types of Research Use and Subcategories**

<sup>99</sup> Argyris and Schön, 1978, pp.18-26.

<sup>100</sup> Owens, 2015, p.10.

It is interesting to note that Helen Pallett and Jason Chilvers view double-loop learning to be a prerequisite for policy organisations to gain what Brian Wynne has termed ‘institutional reflexivity’ – the capacity of policy actors in those institutions to critically examine their own assumptions and knowledge commitments about science, the public, and their institutional relationship with the public.<sup>101</sup> This would require self-awareness about their “taken-for-granted models of society, and of science and its boundaries embedded within their culture”.<sup>102</sup> In their analysis of public participation exercises in the domain of UK climate change policy in the first decade of this century, Helen Pallett and Jason Chilvers have argued that policy-makers in DEFRA and DECC are motivated to engage the public by ‘instrumental rationales’, to aid them secure public acceptability for proposed policies. The authors argue that “the dominance of instrumental rationales can preclude transformative communicative learning between practitioners and policy makers”,<sup>103</sup> suggesting that this prevents DEFRA and DECC from becoming institutionally reflexive organisations. They go on to add that “[t]here are a few examples of double-loop or transformative learning in the [Sciencewise] network, though they rarely resulted from formal organisational mechanisms”<sup>104</sup> – providing no examples where such learning did arise from formal mechanisms.

The same authors have since produced a literature review which argues that academics’ own assumptions of organisational stability contribute towards preventing them from observing reflexive learning. The writers

<sup>101</sup> Pallett and Chilvers, 2013, p.1163.

<sup>102</sup> Wynne, 1993, p.322.

<sup>103</sup> Pallett and Chilvers, 2013, p.1171.

<sup>104</sup> Pallett and Chilvers, 2013, p.1175.



therefore acknowledge that there may be diversity and dynamism within organisations than previously assumed:

The failure of previous attempts to induce organizational change and reflexive learning can in part be explained by the adherence to conventional assumptions about organizations as stable, bounded entities and the co-option of interventions by organizational actors and others into instrumental procedural fixes which fall short of the initial promise... A vital focus for future research and engagement therefore will be to explore how the novel and emergent perspectives on organizations and organizational change described in this paper can be used in the development of new forms of normative intervention which embrace the plurality, diversity and messiness of organizations instead of resting on the old assumptions of coherence and rational control.<sup>105</sup>

An additional core concern which this thesis can address, then, is whether social researchers provide a formal mechanism for promoting institutional reflexivity through double-loop learning in a way that does not appear to have been observed hitherto. Given the previously cited literature, there are good reasons to believe that government social researchers would be ill-placed to deliver such changes. The apparent predominance of instrumental rationales shaping policy-makers’ activities, coupled with the prevalent view that ‘criticism is a problem’ for civil servants, seem to suggest that social researchers are unlikely to provide such a mechanism. We can expect the issue to be compounded further by social researchers’ proximity to policy-makers. Nutley et al. argue that the closer that social researchers get to policy actors, the more their independence is threatened, such that they are likely to undergo policy ‘capture’.<sup>106</sup>

At the same time, we also saw in Chapter 1, Section 4 that government social researchers are notionally committed to providing a ‘challenge

<sup>105</sup> Pallett and Chilvers, 2014, p.161.

<sup>106</sup> Nutley et al., 2007, p.253.

function'. As such, while the expansion of capacity for social research expertise might be justified for specific instrumental reasons, once researchers join a team their interpretation of their own role may differ from that attributed to them by colleagues – and is by no means pre-determined. This point resonates with Susan Owen's view of expert committees:

As rational analysts or political symbols, advisory bodies serve the purpose of others, and their function might be characterized as *instrumental*. As cognitive and discursive agents, they can develop a degree of *autonomy*, in the sense that they may not only (or not even) serve the purposes for which they were established.<sup>107</sup>

So while the rationale for recruiting government social researchers is likely to be driven by a single-loop instrumental rationale, once employed they might attain a degree of autonomy to set their own agendas internally. We should therefore beware of presuming that they will be 'captured' within policy processes. Instead, we should treat the negotiation of their influence as an empirical problem. Next we turn to the final set of perspectives that will help us to address such questions, by outlining the different forms of influence that might be achieved.

## 7.2 Forms of Influence That Can Be Achieved

We saw in the previous subsection that social scientists can help policy-makers to learn from social science either through informing ideas within a particular policy framing, or by contributing to the way in which policy and research questions are framed – and therefore the types of questions that are seen as acceptable. A further distinction can be drawn between theories of

<sup>107</sup> Owens, 2015, p.16.

research informing policy (either in a single- or double-loop sense) in linear and predictable ways on the one hand, and those which describe this process as under-determined and unpredictable. The former can be described as constituting ‘a rationalist’ perspective, and is criticised by advocates of two other accounts: the ‘conceptual’ model and the ‘enlightenment’ model. Both criticisms of the rationalist model of research support a messier conceptualisation of policy-making. The conceptual model presents research use as “chang[ing] ways of thinking, alerting policy makers and practitioners to an issue or playing a more general ‘consciousness-raising’ role”.<sup>108</sup> This perspective thus emphasises that research does not simply provide an answer or a number that will inform decisions – it often provokes deeper reflection than that, and perhaps complicates views of the range of issues under consideration. Some argue that this conceptual form of research use is more likely to occur than a linear form of research use<sup>109</sup> – although it remains to be seen whether this is the case for research produced *within* government departments.

The second criticism of the rationalist account of research use is based upon Carol Weiss’s ‘enlightenment model’ of social science influence.<sup>110</sup> On this account, social science research informs policy-makers not only in terms of research findings, but also through the gradual permeation of concepts and ideas through “unguided and unmediated channels”.<sup>111</sup> Weiss adds that this form of influence is unpredictable, slow and “inefficient”, with a high likelihood for misconceptions and “distortions” to occur in the translation

<sup>108</sup> Nutley et al., 2007, p.36.

<sup>109</sup> Nutley et al., 2007, p.36.

<sup>110</sup> Weiss, 1979, p.429.

<sup>111</sup> Weiss, 1979, p.430.

process. As such, she notes that the process “may come to resemble “endarkenment” as much as enlightenment”.<sup>112</sup>

The enlightenment model has clear implications for the research presented here, as it suggests that we should not imagine social researchers to constitute a sole or privileged channel through which social science insights inform policy-making. Their work might provide a channel for academic insights to enter policy-makers’ discourses, but this will be one channel amongst others and may operate in unpredictable ways – a point emphasised by interviewees as well as in feedback following presentations that I have given throughout the course of this study. Nonetheless, we should not conclude that government social researchers’ own outputs will be more likely to enter policy processes through indirect and unpredictable channels rather than directly. As Katherine Smith notes, Weiss’s enlightenment model overlooks the fact that sometimes policy-makers are actively “on the look out for research evidence”.<sup>113</sup> Under these circumstances it seems appropriate to expect that social researchers achieve more ‘direct’ and predictable forms of influence than external experts typically do.

Informed by these multiple perspectives, Susan Owens has identified five distinct forms of influence achieved by a particular group of experts – the Royal Commission on Environmental Pollution. These forms of influence are: ‘visible, short-term responses’, ‘dormant seeds’, ‘slowly changing the frame’ ‘doing good by stealth’, and ‘dogs that didn’t bark’.<sup>114</sup>

It is the first three of these that are particularly useful for this study. Visible, short-term responses occur in cases where the research recommendations

<sup>112</sup> Weiss, 1979, p.430.

<sup>113</sup> Smith, 2008, p.18; citing Boaz and Hayden, 2002.

<sup>114</sup> Owens, 2015, p.125-145.

correspond in a very straightforward sense with the actions of government, and this action occurs close to the time of reception of the commission’s advice. But it may be that government actors act upon the Royal Commission’s recommendations at a later time, under more favourable circumstances, and this is what is meant by the view of research insights as ‘dormant seeds’. These first two forms of influence are more closely associated with single-loop learning. Intriguingly, Owen argues that occasionally the Royal Commission achieved influence through the gradual reframing of policy problems, as the result of long-term engagement between the Commission and policy-makers. Owens refers to this form of influence as ‘slowly changing the frame’, emphasising the Royal Commission’s role as a persistent advocate of change, amongst other actors.

By ‘doing good by stealth’, Owens captures the more “invisible”, “gradual”, and “diffuse” means by which the experts influenced policy-makers. For instance, she notes that the Commission could raise the level of activity on a topic within a department just by making civil servants aware that they will be producing a report on it.<sup>115</sup> This form of influence assumes that experts adopt a degree of independence from which they can hold government officials to account, and is not relevant here where social researchers operate as insiders.

Last, Owens identifies cases where the Commission’s advice never gained salience with policy-makers, even under changes in the broader circumstances, and these are referred to as “dogs that didn’t bark”.<sup>116</sup> On a practical note, the author observes that it is not always easy to distinguish between those cases where influence is achieved over time – such as by

<sup>115</sup> Owens, 2015, p.140.

<sup>116</sup> Owens, 2015, p.141.

slowly changing the frame or through dormant seeds<sup>117</sup> - from those where no influence is achieved at all. Nonetheless, sometimes advice just went contrary to the “general direction of change”<sup>118</sup> with no prospect of circumstances changing in the opposite way at the time of writing. Given that Owens’s analysis covers a 41-year history, the inference that a piece of research is a ‘dog that didn’t bark’ is more applicable in her study than in the more recent history being told here.

Owens’s account thus emphasises that close attention must be paid to the circumstances in which research use occurs. In this chapter, we have already considered a wide range of contextual factors that will be important for understanding the conditions in which social researchers can influence policy. We can expect, for instance, that the perceived value of their contribution amongst internal actors will vary at different stages of the policy cycle, and according to different actors’ interpretations of their own/ the organisation’s interests. We can also expect politicians’ perspectives and the nature of the interactions between actors (including relative status) to be important in shaping their influence. All of these contextual circumstances will be important for understanding the history of social research influence in DEFRA and DECC.

## **8. Conclusions**

In summary, this chapter has developed the two-part theoretical framework that is used in this thesis to understand changes in social research capacity and influence in DEFRA and DECC, since the two departments were formed

<sup>117</sup> Owens, 2015, p.132.

<sup>118</sup> Owens, 2015, p.144.

in 2001 and 2008 respectively. The first part of the framework, which concerns changes in social research capacity (i.e. in the number of researchers, their seniority, resources and the type of work they engage with), is premised on the idea that we can understand these changes by exploring how civil servants learn *about* social research. This draws our attention to key actors’ interactions which give rise to new understandings of the meanings, roles, and value in social research – and which must be understood in the given institutional, political, and epistemic context. It is in this way, I argue, that we can make sense of the changes in social research capacity in DEFRA and DECC.

After considering changes in social research capacity in these two departments, we will turn our attention to social researchers’ influence in specific policy areas. It is expected that similar dynamics will be at play in shaping how civil servants learn *from* social researchers: we will need to pay close attention to the social researchers’ interactions with other officials, and the institutional, political, and epistemic context that influences these. To make sense of their efforts, it is useful to distinguish between researchers’ attempts to inform policy-makers’ ideas within a particular research or policy framing, and attempts to inform the framing itself. Noting that influence can take place through a variety of means, and may happen immediately or gradually, Susan Owens’s categorisation of forms of influence can help to make sense of the various contributions social researchers have made in DEFRA and DECC.

## Chapter 4

### Social Research Capacity in DEFRA<sup>1</sup>

“We need more social researchers...”

- This phrase was uttered by many interviewees when recounting the history of social research capacity in DEFRA

#### 1. Introduction

WHEN DEFRA was formed in 2001, no government social researchers were employed. The fact that at the time of interviewing there were approximately twenty social researchers in DEFRA (led by a Head of Profession who is a senior civil servant) was frequently expressed as a sign of how far the department had come in building capacity for social research expertise. This is considerably fewer than the number of natural scientists, economists, and statisticians in the department, but it is nonetheless indicative of a department that houses diverse epistemic perspectives.

<sup>1</sup> In preparing for fieldwork I had read that after publishing the department's first *Evidence and Innovation Strategy* report, entitled *Delivering the Evidence*, the Chief Scientist spontaneously and humorously referred to it as 'Delivering the Elephants' (Anthony, n.d.). Having come to the end of drafting this chapter I feel that I can understand how producing an extended piece of writing can be analogous to delivering an unruly beast.



This chapter addresses the first research question in this thesis by providing an account of how DEFRA’s capacity for social research expertise has changed since the department was established. To this end, the chapter provides a historical survey that explores actors’ efforts in creating opportunities, resources, and legitimacy for social research expertise. We will see that in doing so, they dynamically reconstitute “the forms of knowledge that are admitted and admissible in the scientific civil service”.<sup>2</sup> The chapter explores how the department’s internal specialists and their external advisors approached a range of issues at the time, including what form the department’s engagement with social research expertise should take and how a persuasive case could be made. I show that civil servants’ perceptions of the meanings, roles, and value of social research expertise gradually changed over time. And I argue that it is through *challenge* that such changes were made possible.

The chapter proceeds by distinguishing three periods of DEFRA’s history. Section 2 shows that between 2001 and 2005 some important milestones were achieved in terms of the inclusion of social science experts on advisory committees and the hiring of government social researchers. Section 3 focuses on the period between 2006 to 2008, when a community of social researchers, their internal colleagues, and external experts began to demonstrate the potential significance of social research expertise across the department’s remit – i.e. not just within specific policy areas such as rural policy, but as a form of expertise that could be relevant in even the most technical policy areas in the department’s portfolio. This provided the basis for which a persuasive case was made for further growth in capacity. The

<sup>2</sup> Webster, 2007b, p.474.

fourth section then highlights how, between 2009 and 2014, social research capacity was broadened out further across the department, with the support of a dynamic leader. The final section before the conclusion examines how these changes bring us to the most recent developments, with implications for social research in the service of DEFRA today.

## **2. 2001-2005: Constructing DEFRA Ontologically and Epistemically**

In June 2001, shortly after being elected for a second term, Tony Blair's Labour Government established the Department for Environment, Food and Rural Affairs. This involved: growing the Ministry of Agriculture, Food and Fisheries (MAFF) staff to include the Environmental Protection team and the Wildlife and Countryside Directorate from the Department of the Environment, Transport and the Regions (DETR), a transfer of responsibilities for animal health and hunting from the Home Office to DEFRA,<sup>3</sup> the formation of the Food Standards Agency, and a symbolic change of name.<sup>4</sup> The new department now had additional responsibilities for environmental protection and for the wider governance of rural communities. This signalled a desire to move beyond MAFF's perceived focus on agricultural production to take a more holistic approach to issues relating to rural communities, the environment, and food consumption.

<sup>3</sup> DEFRA [National Archives], 2001b.

<sup>4</sup> The acronym DEFRA reportedly left out any reference to agriculture or farming because ministers wanted to achieve some distance from accusations that MAFF was too strongly influenced by agricultural industry bodies (see House Of Commons Environment Food and Rural Affairs Select Committee, 2002). The acronym also reads as the Ancient (and Modern) Greek term for the ash remains from a fire. It is tempting to believe this was an intentional, albeit implicit reference, symbolising the department emerging from hotly contested issues. I could find no evidence of this link being explicitly made, however.

### *“Challenge and Be Challenged”*

These institutional changes were motivated in part by the public scrutiny that MAFF faced in managing the government response to recent epidemic diseases such as bovine spongiform encephalopathy (BSE) and foot-and-mouth disease (FMD).<sup>5</sup> After the ministry's handling of the issues surrounding the BSE and FMD outbreaks, MAFF's Labour Ministers (particularly Jack Cunningham and Jeff Rooker) sought to reform the ministry's long-standing relationship with the agricultural industry. They wanted to restore public confidence by placing greater priority on consumers' concerns. Indeed these politicians had already been critical of this relationship for many years and were openly discussing a change of name to reflect new government priorities from as early as May 1997, immediately after Labour had come to power. At this time 'Department for Food and the Countryside' was proposed.<sup>6</sup> The 2001 Foot-and Mouth Disease outbreak escalated public attention on MAFF and provided an additional impetus for the Labour Government to dissolve the department. The new department would seek credibility from stakeholders concerned with these issues, with significant implications for the use of research – as we will see throughout this chapter.

Margaret Beckett was appointed the first Secretary of State for DEFRA. She had a vision for DEFRA to adopt better processes and different outcomes to those that MAFF had pursued. DEFRA was to use advice better and take a more inclusive, consumer-focused approach than its predecessor:

We want to be a department which goes about its business with the benefit and knowledge of a wide range of interests – and is open about it. We will consult with the right people at the right time, recognising that we may need to target different

<sup>5</sup> See Taylor, 2003; Wilkinson, 2007.

<sup>6</sup> The Independent, 1997 and Farmers Weekly, 1997.

groups in different ways. Our strategy will put the theory of inclusive, outward-facing, joined-up and customer-focused government into practice across all areas of our work.<sup>7</sup>

Included in this vision was a commitment to expand the department's ability to work with diverse bodies of expertise, across the broad range of issues in its new portfolio:

We are raising the status and profile of science within DEFRA to deal with our challenges. We are also strengthening economic and social research to reflect our wide remit.<sup>8</sup>

In short, Beckett i) perceived a desire from concerned citizens and other stakeholders for substantive changes in output, ii) believed that change could be achieved and iii) saw science, economics, and social research as important tools for attaining better outcomes – which are the three conditions that Boswell identifies as conducive for a policy institution to be motivated to use research instrumentally (rather than symbolically).<sup>9</sup> A promising start for the department to build social research capacity.

Interviewees recounted that the department's newly appointed Chief Scientific Advisor, Howard Dalton, (and his team of civil servants who comprised the Science Directorate) shared the Secretary of State's commitment to building a strong and diverse evidence portfolio. This team was aware that at the heart of MAFF's perceived failings lay experts' and citizens' scrutiny of the ministry's use of scientific advice, and so part of their role was to determine what good engagement with scientific advice would

<sup>7</sup> DEFRA, 2002, p.35.

<sup>8</sup> DEFRA, 2002, p.35.

<sup>9</sup> Boswell, 2009, pp.49-56.

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look like. As the next three sections attest, resolving this matter would involve a great deal of challenge.

With strong encouragement from the Anderson and Phillips reviews of MAFF’s use of scientific advice on FMD and BSE,<sup>10</sup> as well as new guidelines from the Office of Science and Technology, one of the first steps taken by the Chief Scientist and his team was to develop an interim Science Advisory Group. This was formed in October 2002. It comprised a range of academic scientists with biological, environmental, agricultural, and veterinary science expertise, along with an expert from the food industry, an advisor on consumer issues, and the then Chief Executives of the Biotechnology and Biological Research Council, the Natural Environment Research Council, and the Economics and Social Research Council.<sup>11</sup> From the outset the Chief Scientific Advisor explicitly asked this group to provide a “challenge function” to the department,<sup>12</sup> particularly in interrogating the claims in submissions from policy teams for the development of the department’s first science and innovation strategy – to be published in spring 2003.

With hindsight we can see that the resulting science and innovation strategy – the first of four published within the time period under consideration<sup>13</sup> – identified objectives that would later be mobilised in efforts to develop social research capacity. These are listed in the table below.

<sup>10</sup> DEFRA SAC [National Archives], 2008.

<sup>11</sup> DEFRA SAC [National Archives], 2008.

<sup>12</sup> DEFRA SAC, 2006.

<sup>13</sup> DEFRA, 2003a.

**Table 2: Objectives relating to social research in DEFRA's Science and Innovation Strategy, 2003**

Objectives	Page reference
"to improve our understanding of the economic and social drivers of change in resource use and assess different ways of influencing behaviour"	p.12
"to better understand rural communities, how they operate, how to achieve greater sustainability, and how to tackle social exclusion"	p.17
"to help DEFRA learn more about the social dimensions of risk"	p.21
"to investigate how institutional and technological changes are affecting the agricultural industry"	p.24
"to explore consumers' attitudes to, as well as the social, economic and environmental impacts of, animal diseases"	p.29

The document did not explicitly discuss these points in relation to social science expertise, but it did argue for greater collaboration across natural sciences and social sciences,<sup>14</sup> and was seen by interviewees as endorsing the value of social science expertise. Notably, all of these objectives suggest a role for social science as the basis on which to make decisions at an early stage in policy design, rather than as an 'end-of-pipe'<sup>15</sup> tool for achieving public acceptance of predetermined policy ideas.

The Science and Innovation Strategy report was described as "aspirational"<sup>16</sup> by one actor who had worked on it – in that it contained research opportunities which the team were not expecting to be able to find funding for in the near future. These were nonetheless included in order to

<sup>14</sup> DEFRA, 2003a, p.29.

<sup>15</sup> Lowe et al., 2008, p.230.

<sup>16</sup> A former scientist in the Science Directorate (1).

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raise the profile of the issues across the department. In a favourable political climate in which evidence was valued by politicians and steps were taken across government to strengthen its role in policy-making, this could be interpreted as a legitimising gesture,<sup>17</sup> backed by a commitment to make progress towards achieving these possibilities. In this way, this document was not the result of a settled debate on the evidence priorities of the department: it was just the start. Over the next few years, the Chief Scientist, the Science Directorate and other internal and external actors sought to develop a capacity for social research expertise, as part of a broader science and innovation strategy.

The Chief Scientist’s Science Advisory Group was replaced by a more permanent Science Advisory Council (SAC) in February 2004. Amongst 12 natural scientists and a lay member, two social scientists were also appointed to this body of expert advisors. Their involvement helped to shape the meanings, roles, and value that came to be associated with social research expertise amongst different actors in DEFRA.

The two social scientists had little in common at first: they disagreed in their approach, concerns, and even judgements over what constituted appropriate attire. But over time they came to support and even influence each other’s stance on the committee.<sup>18</sup> The next subsection delves a little deeper into these social scientists’ conceptions of the role of social science in and around DEFRA.

<sup>17</sup> Boswell, 2009, p.29.

<sup>18</sup> Both social scientists recalled this in interview.

## 2.1 SAC's Social Scientists and Social Research Capacity

One of the pair of social scientists on DEFRA's SAC was a Professor of Science and Technology Policy. He had previously sat on similar science advisory committees, and was somewhat surprised to receive the invitation because of the critical stance he adopts:

"I have a critical agenda, I come out of NGOs [non-governmental organisations], I'm really concerned about the kinds of things that happen in terms of the interpretation of science and policy, the suppression of uncertainty, the way power works to foster certain directions for science and innovation, and suppress others. I'm just really clear about what it is that I want to challenge. And that's why I thought I would be chewed up on the first one, and that would be it."<sup>19</sup>

The surprise expressed by this social scientist is consistent with other reports from the early years of Labour Government, where policy-makers were reaching out to involve diverse perspectives in advisory processes. As Simon Jay Lock reports in his PhD thesis, a different social scientist (Alan Irwin) was just as surprised to be repeatedly invited by policy-makers to help them to "bridge a perceived gap in public trust in science",<sup>20</sup> sometimes with a minister in attendance:

"It was a real shock to discover it was an absolute open door ... by that point in time, [c.1999] there was this, 'it's fantastic, you've come to help us, that's great, come in'."<sup>21</sup>

The researcher saw his role on the SAC not so much as enabling an instrumental utilisation of social science insights. Rather he would ask

<sup>19</sup> An academic social scientist who is a former member of DEFRA's SAC (1).

<sup>20</sup> Lock, 2008, p.163.

<sup>21</sup> Interview with Alan Irwin conducted in 2004, reported in Lock, 2008, p.163.



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critical questions about how experts interpret and represent knowledge claims within the committee:

“And I thought at the time that – why are they inviting someone like me? Because I’m totally not what they’ll want – the social science that they’ll want for that is different to the kind I am interested in. Because the social science that I’m interested in – and it’s been a feature through all of the advisory work that I’ve done, is not what goes on in society at one end of the telescope, it’s what social issues arise at the other end of the telescope, in the committee itself. So what kinds of social interaction and implications are there at play in the committee, and its immediate environment and its relations with the secretariat and its various stakeholders?”<sup>22</sup>

This social scientist was thus concerned more with ensuring that appropriate scrutiny is applied to the science advisory process, than with establishing a social research tradition across the department as a whole. He provoked deeper reflection on the evidence based policy agenda in general, and specific scientific knowledge claims in particular – from animal health to the use of toxic chemicals. He encouraged the opening up of debate to engage broader stakeholders (which was pursued in a large public consultation on the development of the department’s next *Evidence and Innovation Strategy* report (E&IS) in 2005/2006).<sup>23</sup> And he used his position on the council (and related sub-committees) to ask critical questions about how a particular issue was framed, such as pesticide risk, to draw attention to issues that were receiving less attention than others were, and to investigate what uncertainties or assumptions were embedded in the science.

Over time, this social scientist found that his contribution to the committee was acknowledged as valuable, seemingly *because of* rather than *in spite of* his disagreements with senior government scientists:

<sup>22</sup> An academic social scientist who is a former member of DEFRA’s SAC (1).

<sup>23</sup> DEFRA, 2005.

“There is in the system, appreciation, even when somebody disagrees with you – as for instance, [the then Chief Scientist in Government] David King really disagreed with my position on GM [genetically modified crops] – but he actually thought it was really useful to have it there at the table. Whether for the legitimacy purposes, to say, ‘look, we’ve got a guy in here and at least you can work with this guy’, or because actually on an intellectual level, because ‘well actually some of these questions are quite good to raise because I hadn’t thought of them before.’ So that was the kind of principle.”<sup>24</sup>

Hence, it was not just social science expertise that was valued here, but also the provision of *challenge* from a social science perspective – although, as the interviewee notes, it is not clear whether the rationale to include someone with this perspective was instrumental, symbolic, or both.

This social scientist made an important contribution in this regard, but had little concern with the question of whether DEFRA should employ more social scientists. He explained in an interview that that would not be conducive to STS-informed scrutiny of science advice. As such, through his critical engagement with the SAC and with internal specialists and generalists he encountered, he encouraged the department’s engagement with social science in terms of opening up of debates to include a broader array of perspectives.

The other social scientist on the SAC was an academic rural researcher who was influential amongst Labour Party Ministers, particularly Jack Cunningham. He had previously suggested a name change for MAFF to include the term ‘rural affairs’, in order to widen the department’s remit beyond agricultural business so that it took responsibility for rural matters such as, for instance, issues around deprivation and social exclusion in rural

<sup>24</sup> An academic social scientist who is a former member of DEFRA’s SAC (1).

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communities.<sup>25</sup> To this end, he had also written to the Chief Scientist, prior to his selection for the SAC, to argue that the department needed to frame its remit around an agenda of social and environmental sustainability. This, he argued, would require a new blend of scientific capacities, pointing out that the new department would need to recruit social scientists to work along with the economists and ecological scientists in the teams inherited from DEFRA's predecessors. For this actor then, a growth in social research capacity would be conterminous with the challenging of the agricultural economics paradigm that privileged agricultural issues above other social and environmental concerns in rural communities. After successfully competing for a place on the SAC, he was now eager to confront the internal barriers to the recruitment of social researchers in the department. The researcher explained in an interview that positioning himself thus would enable a more pluralistic, research-inclined conceptualisation of the social sciences to emerge, in contrast to what he saw as the dominant framing of deductivist welfare economics analysis characterising the department's economics division at the time. His motivations for encouraging a growth in social research capacity were thus instrumental in Boswell's sense,<sup>26</sup> in that he wanted the research to form the basis for a different approach to policy-making.

Some of the department's economists were (understandably) hostile towards such a conception of social research expertise, and would dismiss the very idea of a social 'science', asking, for instance "why do we need social

<sup>25</sup> Some interviewees attributed the success of this argument in terms of its salience for Labour Ministers who wanted to hold on to the rural constituencies they had unexpectedly won in 1997.

<sup>26</sup> Boswell, 2009, p.29.

researchers because we [already] consult stakeholders?'.<sup>27</sup> In response he would argue that social science can give policy-makers a more systematic understanding of stakeholders' perceptions. He would also confront this challenge by reminding his ministerial contacts that agricultural economists were not always right – particularly in their stance against engaging with the European Union's Common Agricultural Policy, pointing to existing academic literature that took an alternative social science perspective advocating reform.<sup>28</sup> He thereby constructed different arguments to persuade different actors of the importance of DEFRA building capacity for social research expertise. All the while, he was devoting a lot of time towards helping to make rural social research more visible amongst civil servants and MPs, by working with them to set up a rural policy committee, commissioning academic research on the topic, and arranging a conference which was attended by the Minister Alun Michael to enable knowledge exchange.

Clearly then, the two social scientists on SAC differed in how they perceived the role of social science broadly, and their own roles in engaging with the committee in particular. The first saw little value in the idea of an in-house social research capacity. From his perspective, by virtue of being 'insiders', social researchers in DEFRA would be ill-positioned to scrutinise the claims and use of science by their elite colleagues. By contrast, the latter saw the development of an in-house capacity as essential for challenging the prevailing agricultural economics perspective at the time. The following subsection focuses on the steps taken towards building an in-house research

<sup>27</sup> An academic social scientist who is a former member of DEFRA's SAC (2), recalling questions asked by the department's economists who were hostile to the idea of increasing internal social research capacity.

<sup>28</sup> For instance Lowe et al., 1999.

capacity, as inspired in part by the work of the second social scientist. We will return to these social scientists’ divergent perspectives with the benefit of hindsight in Section 5 of this chapter.

## 2.2 Towards an In-house Social Research Capacity

After a recruitment process supported by the Chief Scientist and involving the Head of the Government Social Research Service across Whitehall, DEFRA’s first in-house social researcher joined the department in 2004. The analyst was embedded within the Rural Policy Directorate, and given the task of commissioning research under the Rural Research Programme. This included research to better understand rural matters such as social exclusion, access to services and affordable housing in rural areas. This analyst, who held the role of Head of Profession until a social researcher was employed at the level of a senior civil servant in 2010, went on to build a team of three researchers within the rural policy team between 2004 and 2005.<sup>29</sup>

There was clearly a very precise interpretation of what is an acceptable role for social research invoked in the employment of this social researcher: it would provide evidence on the concerns and experiences of rural communities. In the light of previous hostility to the idea of this role from some economists, SAC’s rural social scientist (unsuccessfully) argued that the social researcher should report to the Head of Science rather than the Chief Economist. One reason for this might be that the Science Directorate wanted to encourage interdisciplinary work between economists and social researchers – a matter we will return to in Section 3.

<sup>29</sup> Unfortunately this individual was unavailable for interview.

Given the way the department's remit had been framed to address rural affairs, and the steps that were taken by the academic rural researcher as well as those by the science team in developing the department's E&IS, I would suggest that it is little surprise that, by the time that the first social researcher was employed, rural policy was seen as 'inherently' an area for social research to contribute. As one former scientist in DEFRA recalled:

"So people could get their head around rural research – it's rural, it's about people, about communities, it's socio-economic, there's some social research needed here...It only would have been in the rural management where there was some ownership by social researchers, because it was inherently social research. In the other areas it was mostly big science projects."<sup>30</sup>

The creation of posts for social researchers in that team did not, in itself, set a precedent for more social researchers to be employed across the department though.<sup>31</sup> To many civil servants, the specific area of rural policy was seen as rather anomalous compared to the rest of the department in that it was about the concerns of citizens – and therefore not about scientific issues. A boundary seems to have been perceived between rural policy issues, which were seen as concerning people, and the rest of DEFRA's remit which were more concerned with science issues (and not about people) such that it was not clear to see what social researchers might contribute in DEFRA's more technical remits, as a policy official recalled:

"We had [a natural scientist in the Science Directorate] running around and saying 'DEFRA needs more social researchers'...and my question always was – 'and what

<sup>30</sup> A former scientist in DEFRA's Science Directorate (1).

<sup>31</sup> Although these social researchers did train analysts and advisors in other teams on how best to commission, manage and use social research – see DEFRA SAC, 2006, p.8.

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will they do?’....And [the natural scientist] would always go away. Not a very good case for what they would do.”<sup>32</sup>

For some in the department then, ‘social research’ lacked a clear function in other policy areas. This was confounded by the fact that, in the early DEFRA years, civil servants who had previously worked in MAFF held academic social scientists in low esteem. These issues, which were raised by multiple interviewees and are also consistent with the contemporary challenges to the credibility of social science from politicians as discussed in Chapter 3, are recounted concisely below by a natural scientist who worked hard in DEFRA to build capacity for social research expertise:

“It was uphill for two particular reasons. One was – what’s always bugged me is the almost total inability of social scientists to talk in a language that was remotely related to English. And a lot of the concepts social scientists were using were strange to not just other scientists and economists for that matter, they were very strange to policy-makers. So there was a translation issue for a start. I think the other problem was a mind-set on the part of policy-makers. And that was a sort of line of thinking that said roughly well, social science is about social issues, and social issues are about policy, and policy is about what we do so we don’t need social scientists. It was roughly along that sort of thinking. And that was really quite deeply imbued. I heard that line put forward by more than one senior and intelligent policy colleague. Who were also of the thinking – particularly through the Thatcher period – that social scientists were all wearing sandals and had beards. Definitely not, you know, not just politically opposed to the Thatcher group, but not in the mind-set of what government was trying to do at that time. That was in reducing scale of government, reducing the scale of government interference in public life and privatisation and all of those sorts of things. And it just didn’t chime with a lot of what was coming out of social science.”<sup>33</sup>

In summary, social scientists had not provided a convincing argument to policy-makers that the latter ought to *value* the input of social scientists. In turn, this restricted their imagination of the ways in which social research could constructively contribute in the department.

<sup>32</sup> A DEFRA policy official (1).

<sup>33</sup> A former scientist in DEFRA’s Science Directorate (2).

But there was now a growing body of actors, including the Chief Scientist, members of his SAC and the Science Directorate, as well as the new social researchers, who worked together to try to persuade policy-makers that social research expertise could contribute constructively to their own area of work.

An issue they faced was the magnitude and complexity of the department. Making the case for social research within DEFRA would require a multiplicity of conversations, engaging distinct communities within the department. This point is emphasised below by SAC's former rural social scientist, who stresses the diversity across DEFRA:

"The thing is so balkanised – you can't say 'the scientists who commission and manage the department's research'. You can't say 'the civil servants who are the primary customers for the results of the research'. It's a huge government department, including many policy communities ranging from fisheries to waste management to nature conservation to rural affairs, et cetera. The scientists who huddled round the Chief Veterinary Office had to be convinced separately from the scientists in different positions under the Chief Scientist. And then there were the economists. So all you could say at a sort of official level – in what DEFRA put in terms of its Evidence and Investment Strategy – was that it recognised the need for interdisciplinarity and more investment in social research. And you could say that the government accepted our report [on *Increasing the Capacity and Uptake of Social Research* – discussed in the next section]. It was accepted by the department... whatever 'the department' means."<sup>34</sup>

The quotation also alludes to an important point regarding the scientists' view of social research. While the Science Directorate were dedicated to the development of social research expertise and greater interdisciplinarity, they too would need to be convinced that social research could make meaningful contributions to science-based problems, rather than those questions concerning citizens' attitudes. SAC's rural researcher put it in the following terms:

<sup>34</sup> An academic social scientist who is a former member of DEFRA's SAC (2).



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“They often naively assumed that social researchers could furnish the missing ‘human dimension’ in the application of technical solutions to the problems that DEFRA had to resolve.”<sup>35</sup>

This respondent emphasised that such views did not stem from antipathy, but rather from a lack of prior experience with social science that had made contributions in a more interdisciplinary way. He would try to work constructively with this interpretation of social science’s role, to make the case for more resources to be invested in understanding the socioeconomic implications of science, which typically gained support from the scientists.

Yet, at the same time, he would seek to move beyond this narrow conception of the role of social research as an “end-of-pipe” consideration.<sup>36</sup> A good case in point is the animal health policy area. The high-profile and politically sensitive matters of BSE, FMD, and bovine tuberculosis had emphasised that the department was susceptible to potentially destructive effects of public controversies, but there appeared to be no relevant social research that could help the department to address these issues in the future. SAC’s academic rural researcher recalled his own efforts to stimulate demand for social research in this domain:

“And all the time I was being plunged into fields that I knew nothing about. I volunteered to be a member of the DEFRA SAC sub-committee on ED – epidemic diseases – on animals and plants. And I knew nothing about diseases of animals and plants! But I had to say when they had a threat of flu amongst chickens, why would they need social research in relation to that. I’d say well our experience with foot-and-mouth was that it was the social reaction of people – and I said that our economy is much more likely to suffer from what I would call ‘headless chicken phenomenon’ - rather, people panicking and not buying chicken.... And we’d seen

<sup>35</sup> An academic social scientist who is a former member of DEFRA’s SAC (2).

<sup>36</sup> Lowe et al., 2008, p.230.

that at the time of foot-and-mouth. It was a silly thing really. And they'd look at me and think 'he doesn't really think headless chicken's a disease, does he?'" <sup>37</sup>

In this particular instance then, the researcher sought to promote a role for social research in terms of exploring the economic implications of the spread of epidemic diseases – an issue in which the researcher himself had no directly relevant expertise. This researcher then went on to attempt to remedy the lack of social science attention to epidemic diseases by recruiting social scientists to work on interdisciplinary projects with natural scientists on epidemic diseases, through a research programme that he directed, with funding from the research councils:

"And through that we commissioned interdisciplinary research on animal and plant diseases. And we had to attract people who'd never worked on the social science side on animal diseases and plant diseases, to work with natural scientists. As a sort of deliberate act of science policy initiative really. To stimulate a social science of animal and plant diseases. So you could understand, here I am trying to stimulate demand in DEFRA for social science, and saying what social science could do for you – while knowing that there wasn't the social science out there to do anything! Because, there'd been never any demand for it." <sup>38</sup>

To encourage senior officials to build capacity for social research then, he not only sought to persuade officials of the roles that social science could play in the department and why it should be valued, but also to construct new interpretations of what social research *is* – in DEFRA as well as in academia.

Although it would be some time before a social researcher was recruited to contribute to the animal health and welfare policy team, we can see how a coalition of allies interested in building up social research capacity within

<sup>37</sup> An academic social scientist who is a former member of DEFRA's SAC (2).

<sup>38</sup> An academic social scientist on DEFRA's SAC (2).

DEFRA gradually grew. They achieved progress in terms of supportive statements in the Science Directorate’s reports<sup>39</sup> and the recruitment of a handful of social researchers in rural policy. But it was clear to the actors involved, as I hope it is to the reader, that establishing a social research tradition across DEFRA would not happen overnight.

By the end of 2005 the only policy team to have secured a budget for embedded social researchers was the rural policy team. But in that year, during which the policy teams were assessing their upcoming evidence priorities for the 2006 E&IS,<sup>40</sup> two social researchers were deployed to the department’s Central Analytical Directorate, where economists and statisticians were situated. These social researchers were employed there to provide support to the teams that requested it, and particularly focused on helping policy officials to identify evidence priorities. As part of this process, the design and commissioning of policy evaluations emerged as one key area where government social researchers hold expertise, and policy teams were encouraged to consider how this could be pursued within their area in line with best practice in other government departments.

At this time there was also an emerging interpretation of social science expertise in the sense of understanding peoples’ behaviours with a view of influencing them better than through the traditional levers available to government, such as taxation, regulation, and information provision. The emergence and development of this strand of social researchers’ work will be explored in depth in Chapter 6. It suffices to acknowledge here that by 2005 academics’ and research consultants’ work in this area was becoming

<sup>39</sup> DEFRA, 2003a.

<sup>40</sup> Now termed ‘*Evidence and Innovation Strategy*’ rather than ‘*Science and Innovation Strategy*’, in a symbolic step to acknowledge the Science Directorate and Chief Scientist’s commitment to investing in evidence, rather than science for its own sake.

increasingly valued by DEFRA's policy-makers for its potential to contribute to the development, as well as evaluation, of policies. Such research was explicitly referred to in the department's first Sustainable Development Strategy,<sup>41</sup> and its significance was beginning to be particularly appreciated by the sustainable consumption and production (SCP) team.

The two social researchers in the Central Analytical Directorate played a pivotal role in pointing policy officials to interpretations of social science that they might not have previously considered. An interviewee who was formerly in the Science Directorate reported that in turn his team would encourage and endorse references to social research expertise in policy teams' submissions to the directorate's E&IS process.

In these ways we can understand how, by the end of 2005, social research expertise came to not only be imbued with new interpretations of how it could serve DEFRA, and why it should be valued, but also what it *is*. The scientists and social researchers inside and outside DEFRA contributed towards expanding the array of what is seen as constituting social research expertise to cover not only a deeper understanding of rural issues, but also the skills to design and implement policy evaluation, as well as competencies in understanding and influencing behaviours. And hence social research capacity had already changed considerably since 2001.

But the next period, 2006-2008, is arguably the time when government social researchers really began to make an impression on the department. The following section focuses on a key outcome of the efforts to promote social research through the production of the next E&IS, and subsequent developments.

<sup>41</sup> HM Government, 2005.

### **3. 2006-2008: Expanding Social Research Capacity in DEFRA**

By mid-2006 the Chief Scientist and Science Directorate staff completed the evidence investment strategy project. The end product, *Our Approach to Evidence and Investment*,<sup>42</sup> celebrates the progress made thus far in bringing in social research capacity:

Social Research. A recently established central social research advice and support capability has been working with policy areas on priority themes, as well as undertaking cross-cutting strategic research. This has contributed to a ‘people-based focus’ by linking specialist researchers and exemplar projects. Where specific social research skills – such as stakeholder involvement approaches – have not been available internally, we have drawn on external expertise through academic placements.<sup>43</sup>

Within this document we can also glean an indication of scientists’ greater appreciation for the contribution played by the Professor of Science and Technology Policy on the SAC, as suggested by quotations such as the following:

We have already developed guidelines to help assess how robust evidence is, but we recognise that evidence in most forms is open to interpretation and challenge, and this should be reflected in the evidence base for policy and the options put before ministers. External experts have a key role in helping Defra consider and evaluate different interpretations.<sup>44</sup>

Furthermore, the report’s authors reflect on the transformative effect that the process has had on their own epistemological outlook:

<sup>42</sup> DEFRA, 2006a.

<sup>43</sup> DEFRA, 2006a, p.10.

<sup>44</sup> DEFRA, 2006a, p.15.

Through the E&IS process we have increased awareness of a range of issues, including the value of the social sciences, the need to balance secondary analysis and interpretation with longer-term research, and the importance of policy monitoring and evaluation.<sup>45</sup>

As suggested by these quotations and excerpts, by now there were tangible contributions associated with social science in the minds of the scientists and civil servants involved in the process by which evidence and innovation strategies were compiled. This was the case in both the critical and the more instrumental engagement of the two social scientists on DEFRA's SAC. In an additional nod to the contribution made by the two social scientists on SAC, the SAC started a new term with new members in April 2006, but these two social scientists were amongst the few members who continued for a second term.

Yet, while policy teams across the department were beginning to acknowledge that social research expertise could contribute to their work, SAC observed that more could be done to ensure that the growth in social research capacity across DEFRA was recognised as a priority. Towards the end of 2006, the department's social researchers, the science team and supporting colleagues sought to make a more compelling case for social research capacity to be increased across the entire DEFRA remit. In late 2006, a social researcher from the Central Analytical Directorate was invited to give a presentation to the newly reformed SAC and the SAC's rural researcher also held a meeting with DEFRA's first social research.<sup>46</sup> The agenda for both of these events was to discuss the barriers to the building of social research capacity in DEFRA. A team was established to explore the present situation and consider future actions that could help to improve

<sup>45</sup> DEFRA, 2006a, p.3.

<sup>46</sup> DEFRA SAC, 2006, p.1.

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capacity and use. This team produced a report in December 2006, entitled *Increasing the Capacity and Uptake of Social Research*, in which the problem was defined thus:

When Defra was formed in 2001, it represented a shift in policy objectives from one concerned primarily with production towards one geared more towards the consumer, environmental protection and the management of natural resources, calling for greater attention to social research and analysis. However, the divisions which were transferred from former government departments did not have significant in-house social science expertise (other than economists).<sup>47</sup>

The report notes that social researchers within DEFRA were particularly under-represented compared with other analytical professions such as natural scientists (approximately 200), economists (68), and statisticians (31).<sup>48</sup> The authors go on to argue that where social research is commissioned without advice from social researchers, the research quality and usability is likely to be undermined:

The majority of social research is contracted out, but in its specification, commissioning and subsequent use there is currently little direct input from recognised social research staff, not least because of capacity. This must raise concerns about whether the research is being well specified, whether directorates are drawing on the most appropriate type and the best sources of expertise, and whether they are adequately equipped to evaluate the work and interpret the results.<sup>49</sup>

In this way, the authors call for not only greater appreciation for the roles and value that social research could have at all stages of the policy cycle but also for recognition of the value of expertise that government social

<sup>47</sup> DEFRA SAC, 2006, p.3.

<sup>48</sup> DEFRA, SAC, 2006, p.8.

<sup>49</sup> DEFRA, SAC, 2006, p.8.

researchers hold in designing, commissioning, and *translating* analysis for policy audiences.

Following this report's publication, a SAC Social Science Sub-Group was formed in January 2007. Its purpose would be to more deeply investigate the current state of social research within DEFRA, and to put forward recommendations to address the barriers to developing social research capacity.<sup>50</sup> The Sub-Group's ambition was that social research evidence would achieve equal 'epistemic recognition'<sup>51</sup> as natural science and economics evidence:

The sub-group note the excellent reputation currently enjoyed by economists within Defra's Central Analytical Directorate. However, members were concerned that the potential for social science (specifically social research) to help answer policy questions was not given the same status as natural and physical science within Defra. It is the sub-group's view that social sciences (particularly social research) need to be given equal rank, where appropriate, to the contribution of the evidence base as all other disciplines.<sup>52</sup>

After completing an internal investigation amongst civil servants in different policy areas, the Sub-Group reported that a failure to recognise social research expertise and a lack of staff had hindered social research utilisation. This, they argued, risked the success of policies:

There was a perception, expressed by some senior staff within core Defra, that anyone could be sufficiently expert at social research. This suggested to the sub-group a lack of understanding of the wide range of distinct disciplines within social science and the value of specialist expertise in social research... Negative perceptions of the role and/or value of social research may have been the result of a naïve understanding or misconception, sometimes combined with an inherent resistance to what was regarded by senior Defra staff as a less important contributor to the evidence base. These negative cultural attitudes were, perhaps, not surprising

<sup>50</sup> DEFRA SAC, 2007a, Section 8.

<sup>51</sup> A term borrowed from Whooley, 2013, p.145.

<sup>52</sup> DEFRA SAC, 2007b, p4.



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given the overwhelming focus on the natural science and economics evidence base in policy making in some parts of core Defra... Where social research inputs are not included in policy and research development, in the view of the sub-group, this can result in significant problems with implementation, effectiveness and public acceptance of policy decisions.<sup>53</sup>

Moreover, the Sub-Group found that where social research was considered by policy teams, its role was too narrowly confined as a “bolt-on” at the end of the policy development process, typically to help secure public acceptability for an initiative.<sup>54</sup>

In short, the Sub-Group found that to increase the demand for social research, civil servants’ interpretations of the meanings, roles, and value of social research must all be addressed. Significantly, the authors used the FMD crisis as an example of a previous failure in which social research could have helped officials to understand the processes by which disease was spread and how it might have been controlled.<sup>55</sup>

The authors went on to argue that a series of steps must be taken by policy teams and by DEFRA’s senior civil servants:

Social research inputs should be included at all key stages of the policy cycle. Social researchers in the Department must be integrated into policy and research development alongside other key professional groups including natural scientists and economists, from the outset...Defra must improve the status, visibility, and professional identity of social researchers in the Department, in order to raise awareness and increase the uptake of social research. Critically, this should include social research leadership and representation at senior management levels.<sup>56</sup>

The Sub-Group put forward 11 recommendations in 2007, placing particular emphasis on the need for senior management to take responsibility for:

<sup>53</sup> DEFRA SAC, 2007c, p.19.

<sup>54</sup> DEFRA SAC, 2007c, p.18.

<sup>55</sup> DEFRA, SAC, 2007c, p.19.

<sup>56</sup> DEFRA, SAC, 2007c, p.3.

encouraging appreciation and use of social research across the department, raising the number and status of internal social researchers, establishing processes of rigorous review and quality assurance, and ensuring that lessons are learnt from past experiences of using social research.

Concurrent with these developments were a series of changes which enabled changes to how the meanings, roles, and value of social research were perceived in the department. First, as will be discussed in Chapter 6, the sustainable consumption and production (SCP) policy team had already, in early 2006, brought in a social scientist to their team – at first as a temporary secondment from academia, but the role was later made permanent. In time, other social researchers joined as the need for social research expertise was perceived to grow in this team.

With hindsight, we can see that social researchers' work on SCP would become crucial for understanding the subsequent expansion of internal social research capacity in DEFRA. Between 2006 and 2008, social researchers (and colleagues) produced and utilised a series of empirical projects that drew attention and engagement from across the department. In doing so, they showed what could be achieved with social research expertise if employed early in the policy development process, as one of the social researcher recalled:

"It gave a different purpose to having social researchers in an evidence team around the department. The social researchers weren't there solely to do the – *how would you evaluate this?* – actually the social researchers were there to think about policy implementation, to think about the most positive way of maximising return on activity on a policy, and making a difference – at a very different level. So it did definitely change the perception of social researchers, certainly in DEFRA – and I think across Whitehall as well."<sup>57</sup>

<sup>57</sup> A social researcher in DEFRA (1).

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Moreover, unlike the empirical projects of the rural policy team, this team’s form of social research seemed to be more straightforwardly translatable to other policy areas – every team was working, in some sense, with people whose behaviours could be better understood.

By now, there was also a proposition to fund a research centre focused on sustainable behaviours. Civil servants were aware of a recent example of a funded research centre which was generally considered to have been a failure because the civil servants found themselves unable to apply the social science produced.<sup>58</sup> The SAC Social-Science Sub-Group claimed that this was because of “DEFRA’s naivety as a social research contractor”.<sup>59</sup> Social researchers and the Sub-Group therefore emphasised the need for lessons to be learned from the prior example – and, in particular, for future research projects to be managed by social researchers who could act as mediators between the policy teams and the external contractor.

Furthermore, the department’s staff were being reorganised under the banner of ‘Renew DEFRA’, which aimed to improve policy delivery and to strengthen the department’s economic credibility when working with other government departments. As part of this, the newly appointed ‘Chief Economist and Director of Analysis’ had proactively sought to improve understanding and collaboration between economists, statisticians, and social researchers so that within their respective policy teams each analyst could articulate the value in other professions’ expertise. In doing so, he built a strong working relationship with the Director of Science, and together they sought to promote interdisciplinary collaboration across the analytical services in the department.

<sup>58</sup> A point made in an interview with one of the actors involved with the sub-group’s report.

<sup>59</sup> DEFRA SAC, 2007c, p.30.

Another element of this restructuring programme was a shift away from regulatory approaches, in favour of interventions that could enable or encourage voluntary change from individuals and stakeholder groups. The social researchers' promise of a greater understanding of peoples' behaviours and attitudes resonated with this new regulation-averse approach.<sup>60</sup>

Hence, by the time that the SAC's Social Science Sub-Group published their recommendations, a gradual change in perceptions about what social research could mean for DEFRA, how it should be valued, and how it should be used to inform policy development was already occurring. Initial barriers to improving the in-house capacity and utilisation of social research (such as a lack of clarity over what social researchers could do for DEFRA beyond making pre-designed policies publicly acceptable, concerns over legitimacy and quality, and the low supply of social research) were being addressed through initiatives taken by civil servants and also through the gradual growth of academic research in areas related to DEFRA's remit. As the SCP example shows, new roles for social research have helped to address the problem of what social research could mean for DEFRA and how it is valued. But, at the same time, scientists and civil servants – particularly through the SAC, the Chief Economist and Director of Analysis and other members of the senior civil service – were working to confront colleagues' perceptions of social research, and thereby encourage greater recognition for social research. With all of these changes collectively knocking at the same door, social research capacity had reached a new peak within the department by the close of 2008. Momentum was now growing, with significant consequences to be realised in the next phase.

<sup>60</sup> Cabinet Office, 2007, pp.19-20.

#### **4. 2009-2014: Expanding Social Researchers’ Autonomy**

During the third phase, 2009-2014, DEFRA’s internal social research capacity expanded out from rural affairs and work on promoting sustainable consumption amongst the public. By 2009, DEFRA employed six social researchers in diverse teams across the department, including in food and farming and natural environment, as well as in sustainable consumption and production. Their function typically included translating recent work on behaviour change into their respective policy areas, amongst other research projects (including policy evaluation). This rise in number of social researchers employed can therefore be seen as indicative of the significance that social research had gained in recent years. Having secured a reputation for social research in the realm of sustainable behaviours, social researchers now made a case for the same techniques to be applied to support policy development in other policy areas, at all stages of the policy cycle.<sup>61</sup>

With considerable change already achieved, the period 2009-2014 saw further expansion and reinforcement of social research capacity across DEFRA. Two related threads are important to take into account here: the move to centralise the SCP policy team’s behavioural experts so that social research capacity could reach policy teams across the department, and the inclusion of a social researcher in developing the department’s third E&IS in 2009. These are examined in the next two subsections.

<sup>61</sup> A review was produced in early 2010, highlighting the social researchers’ approach to understanding and influencing behaviours, and presenting diverse case studies from farming, fishing, energy use, waste, water and personal carbon trading. This document emphasised the role that behavioural research has played in policy development and the translatable nature of a behavioural approach across DEFRA’s remit. – See Collier et al., 2010.

#### 4.1 The Centre of Expertise on Influencing Behaviour

In Chapter 6, we will see that to persuade their SCP colleagues of the importance of social research, the researchers asserted their authority over the matter of what constitutes useful social research. Through challenge and close engagement, they came to be valued more by their colleagues within SCP. Their work drew attention from policy officials across the department, as these officials appreciated the potential value in using such research in their own policy area:

“It was very well done qualitative research, and went down very well across the department. The policy customers across the department recognised the need for it, they bought into it, they got involved in things like steering groups and all of the rest of it to direct the project. That was important because by the time the project outputs were coming through – they were very short projects, about six months or so – all of those policy leads were going ‘actually I do now need to do something in this space, don’t I?’ And so it was a very influential moment – it was one of those moments which actually grabbed attention.”<sup>62</sup>

In recognition of the interest from diverse policy areas (particularly farming, fisheries, and natural environment teams, whose officials then wanted social researchers to produce similar work to that produced within the SCP team)<sup>63</sup> and also from DEFRA’s wider stakeholder network,<sup>64</sup> there was a move to centralise and build upon the SCP social researchers’ expertise so as to provide a more far-reaching function within the department. To this end, in 2010 the Sustainable Behaviours Unit in which they worked was

<sup>62</sup> A DEFRA social researcher (1).

<sup>63</sup> Darnton, 2013a, p.20.

<sup>64</sup> For example the Food Standards Agency, the Consumer Council for Water, the Forestry Commission, the National Farmers Union, the National Union of Students.

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combined with a small team of ‘customer insight’ specialists from the Communications Directorate, to form a new ‘Centre for Expertise on Influencing Behaviours’ (henceforth CEIB).<sup>65</sup> ‘Customer insight’ officials were a recently emerging body of civil service communications professionals who also claimed to have expertise in behaviour change.<sup>66</sup> The aim of the new centralised team would be to continue commissioning behavioural research as before, but to serve policy teams across the department, and not just in the SCP.

The creation of the CEIB is indicative of the new status afforded to social researchers working on understanding behaviours. It gave the researchers greater independence from policy officials in deciding how to deploy their resources. The CEIB’s approach was to work with interested policy teams across the department, arranging training sessions for policy officials to learn how to apply behavioural insights in their own areas. This training function is consistent with the role associated with customer insight specialists and for this reason the merging of specialisms was initially seen by some social researchers as a threat to their authority in understanding and influencing behaviours. But the social researchers successfully argued that the training materials should be based on the highly valued social research that they had already been producing in the SCP team, rather than on generalised theory of behaviour change, like the MINDSPACE report<sup>67</sup> - which the Cabinet Office encouraged (as we will see with DECC in Chapter 5, Subsection 4.1) and which was more typical for customer insight specialists at that time. In addition the CEIB gradually came to be dominated by social researchers, as

<sup>65</sup> Eppel et al., 2013, p.31. For more on the civil service’s distinctions between customer insight and social research, see Chapter 5, Subsection 2.2.

<sup>66</sup> Cabinet Office, 2006.

<sup>67</sup> Dolan et al., 2010.

the customer insight specialists who joined were either replaced by social researchers or converted by joining the Government Social Research Service (GSR).

Hence, the creation of the CEIB was a significant symbolic move for the status of social researchers in DEFRA. Yet, soon after the CEIB was created, the team found that the training sessions could not enable the application of behavioural insights in the way that they had hoped. Despite having achieved greater recognition and indeed the recruitment of more social researchers to broaden their capacity to engage with policy teams, the team experienced difficulties in helping policy colleagues across the department to apply their approach to the given policy area. Working with new policy officials from within a central team meant that it was difficult to establish a close, interactive relationship as they had previously done within the SCP team. It was therefore harder to provide the necessary challenge that would open opportunities for social research to contribute. But as one researcher explained, social researchers also found that they too suffered from a lack of challenge:

“So, in the same way that, you know, evidence challenges what’s going on in policy, I think there’s also a really strong challenge from policy in terms of ‘well, this is really fascinating information you’re giving me, but actually practically what would I do as a result of that information?’. Which is an incredibly useful sort of challenge to an evidence sort of maker. You know, we look at the issues around sustainability and you know you can sort of say, ‘OK, well, what do we need to do to – what do we need to do in terms of the way we consume?’”<sup>68</sup>

In this sense, as a result of the CEIB’s formation, some social researchers reflect that they became a little *too* autonomous from their policy colleagues – in that the distance between them precluded the sort of close-knit working

<sup>68</sup> A DEFRA social researcher (2)



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that was deemed to have been so effective within the SCP team. Challenge, they found, is a two-way street.

Steps taken in recognition of social researchers' expertise in understanding and influencing citizens' behaviours were thus considered to have not been very effective in terms of enabling the application of expertise across the department. In splitting the social researchers from their SCP policy colleagues with a view to achieving greater impact across DEFRA, social researchers' capacity to collaborate with policy colleagues had been weakened. Given these difficulties, and in line with a broader shift within the department to replace centralised research functions (including the Central Analytical Directorate) with a model of embedded analysts within policy teams, the Centre for Expertise of Influencing Behaviours became a 'virtual centre' of embedded analysts across the department, before being disbanded in April 2012. The embedded model of analysis has since been dominant in DEFRA.

But while some in DEFRA described the CEIB as an ineffective initiative from which lessons were to be learned, others recalled its merits. One is that it enabled social researchers to work on longer term projects to develop, consolidate, and translate knowledge, which is reported to be valued less at the time that interviews were conducted (2014):

*“the bonus about working in the Centre for Expertise is that it was – because it was a bit of a step removed – there was probably more scope for doing more innovative, forward thinking research than there is now...And the problem with doing more reactive, smaller projects is that it's extremely time consuming, resource-intensive, actually it does mean that there's a risk that we're not doing enough of that strategic long-term stuff.”<sup>69</sup>*

<sup>69</sup> A DEFRA social researcher (3).

Consistent with Robert Walker's account of social science research officers in government departments in the 1980s then (as discussed in Chapter 3), we see that the research products of social researchers are heavily influenced by institutional arrangements such as the location of the analysts within the organisation. Moreover, while Chapter 6 reveals that much of the social research associated with sustainable consumption was allowed to become obsolete from 2013 onwards, it is intriguing that at the same time in DEFRA other policy teams (such as biodiversity and woodlands management) began to explore the utility of such research for their own policy areas.<sup>70</sup> Furthermore, at the time of writing the action-based-research projects, which, as we will see in Chapter 6, were celebrated as a key component of researchers' work, live on in the form of 'sustainable business research initiatives' under the policy area of 'sustainable economy'.

#### 4.2 The 2010 Evidence Investment Strategy

In 2009, one of the SCP team's social researchers took a post within the Strategic Evidence Team, with the role of contributing to the development of the 2010 Evidence Investment Strategy.<sup>71</sup> This is both an indication of how far recognition of social researchers' expertise had come, as well as a driver for further change. Whereas the 2003 *Science and Innovation Strategy* report hinted at opportunities for social research expertise to contribute, and the 2006 document celebrated some recent contributions and emphasised the value of social research expertise for policy audiences, the 2010 report enabled social

<sup>70</sup> Darnton, 2013a.

<sup>71</sup> DEFRA, 2010.

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researchers to articulate for themselves, for the first time, a tangible and achievable vision for the department’s near-term social research needs.

This report is striking for the prominence granted to social research throughout, with a section devoted to articulating the “critical” importance of including social research (especially in the form of understanding behaviours) even in technical policy areas like climate change, sustainable food supply, and protecting ecosystems services, because:

it is *people* upon whom these policy actions will both impact and rely – as individuals, households, organisations, communities and society.<sup>72</sup> [original emphasis]

The same section highlights how social research can help policy officials to identify new ways of approaching a problem – a move clearly intended to address the tendency of officials to associate social research with an ‘end-of-pipe’ function as discussed in the previous section.

The 2010 document then goes on to articulate a vision for expanding internal social research capacity, as the social researcher recalled:

“I was working on the Evidence Investment Strategy and there was this bit that said ‘here are the specialists that we need’ and there was a bit that said ‘we need natural scientists to do these things, and we need economists to do these things’. And so I said we need social researchers to do these things – and by the way we need more social researchers, and by the way by 2012 we need at least 15, including an SCS [senior civil service] person.”<sup>73</sup>

This ambition for expansion of social research capacity was supported by evidence that social research was now in demand from diverse policy teams:

<sup>72</sup> DEFRA, 2010, p.12.

<sup>73</sup> A DEFRA social researcher (1).

25 of the 29 programmes stated they would benefit from additional social research expertise or wanted a better understanding of social research, especially as the profile of 'behaviour change' rises in the wider policy agenda.<sup>74</sup>

The vision was realised to a significant extent over the next couple of years. In 2011, 12 social researchers were employed. Furthermore, the Chief Economist and Director of Analysis had worked with the Director of Science to create a budget for a Head of Profession employed at the level of the senior civil service. The new Head of Profession would take leadership of social research across the department and advocate social research needs at the director level. The quotation below is typical of many social researchers' reaction to the new Head of Profession:

"[The new Head of Profession] in the department... really raised the profile because suddenly you've got SCS – representation who was quite inspirational – in fact very inspirational – and could hold [their] own against the other disciplines... You know, I don't think it can be overstated, that actually that's been really, really important - having [someone in that] role and being represented at the senior level, means that we are taken seriously and we are remembered...It is important that we are round the table just as much as economists are, and just as much as natural scientists are and operational researchers and statisticians and all the other types of researchers that we have in the department."<sup>75</sup>

The new Head of Profession was not only more senior than her predecessor was, but also considered more charismatic as a 'champion' for social research. And as the previous Head of Profession had been absent on personal grounds for much of the past couple of years, the new leader's fresh and strong leadership was particularly appreciated.

As a senior civil servant, the new Head of Profession for social research was able to attend meetings that were inaccessible to other social researchers –

<sup>74</sup> DEFRA, 2010,p.42.

<sup>75</sup> A DEFRA social researcher (1).

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and the Chief Economist and Director of Analysis and the Director of Science both made sure that she was invited to them. Buoyed by the positive impact that social research had made in DEFRA in recent years, the Head of Profession emphasised the importance of considering social research needs across DEFRA’s remit – including in areas which had no prior record of commissioning social research. As the Head of Profession recalled:

“There is a strategic evidence planning process in the department. And the centre of the department engages with the business to set out what are the evidence priorities. So my role as Chief Social Scientist here is to make sure in those discussions that social science is considered as a serious and important component in the overall evidence base. And some areas that’s more successful than other areas. Some areas have a natural understanding and need and demand for social science. Others less so and it’s taken a bit more persuasion.”<sup>76</sup>

This self-styled ‘Chief Social Scientist’ was thus better placed than the previous Head of Social Research to confront colleagues’ presumptions about social research, and thereby challenge them to engage with research early in the policy-making process.

Incidentally, the term ‘natural understanding’ should not be overlooked in the above quotation – what had been contested in the department’s recent history had now been afforded a seemingly ‘natural’ status. The Head of Profession’s own role in contributing to the understanding of farming behaviours in the animal health and welfare team was not considered possible by some just a few years earlier, as we saw in the discussions on the SAC sub-committee on epidemic diseases.

The strategic evidence planning process that this interviewee mentions contributed towards the department’s latest E&IS, which was published as the fieldwork for this research was drawing to a close (June 2014). Although

<sup>76</sup> A DEFRA social researcher (4).

this report articulates a vision of consolidating resources and making ‘more with less’,<sup>77</sup> it is consistent with its predecessor in highlighting specific areas for social research to contribute as part of interdisciplinary projects. It places a considerable emphasis on behavioural approaches, but also identifies other roles, for instance in ‘systems thinking’ frameworks and in ‘co-owned’, ‘co-designed’ and ‘co-funded’ projects.<sup>78</sup> The action-based research programme was identified as a particularly effective scheme for co-funded projects.

Within the context of austerity, the Head of Profession nowadays holds relatively modest ambitions for expansion in the short-term given the growing recognition of social researchers’ valuable behaviour change work across a variety of DEFRA’s policy areas:

“I think there are probably a few more key posts we need – and that’s probably a handful. And then there’s working together, working collaboratively with the other specialists, and the social science community. And then externally. And then we will be a more powerful force than we currently are. I mean I think we are already pretty significantly improved. It’s not reasonable to expect that we will have the same number at this stage, with all the reductions going on, of social scientists as natural scientists. In the future – whatever form DEFRA takes in the future, and as people understand really what behaviour change means and what it requires – you could imagine a world where you would have a much greater number of social scientists. But at the moment every post has to be fought for – because of the reduction in budgets.”<sup>79</sup>

Nonetheless, the Head of Profession did contribute towards persuading some policy officials to convert their available posts into social research posts – for instance in the area of international affairs and in flooding. Moreover, as a senior civil servant she could also create new embedded social researcher posts using the central evidence budget rather than from a specific policy team budget. This was used to create posts in policy teams which had no

<sup>77</sup> DEFRA, 2014, p.4.

<sup>78</sup> DEFRA, 2014, p.34.

<sup>79</sup> A DEFRA social researcher (4).

prior history of employing social researchers, to ensure social research is included early in the policy process.

Subsections 4.1 and 4.2 have highlighted how far DEFRA’s officials had come in recognising new meanings, roles, and value in government social researchers’ expertise across the department’s remit. Supplementing this was a range of other mechanisms for social scientists to interact with DEFRA’s policy officials. According to data provided by an interviewee, between 2006 and 2014, approximately ten social science research fellows were seconded from academia. These placements were designed to translate expertise on a combination of broad-spanning topics like policy evaluation or strategies for evidence-based-policy, as well as policy-specific topics such as animal health and welfare issues. Capacity also emerged in the form of a new Social Science Expert Panel, which was shared between DEFRA and DECC on the grounds that they had much overlap in their social science advisory needs. This panel was formed in 2011 and will be discussed in more depth in the next chapter, since it was conceived and first developed by DECC’s social researchers.

The social science fellowships and expert panel were described by actors as fulfilling important roles in building DEFRA’s capacity for social research, particularly when they provided opportunities for double-loop learning. For instance, one of the seconded social scientists was perceived as exemplary in translating a social-practices approach to understanding animal welfare issues.<sup>80</sup> Likewise, the Social Science Expert Panel helped to introduce civil servants to the social amplification of risk model when they were struggling to understand citizens’ reactions to the chalara outbreak in 2012.<sup>81</sup> If we add

<sup>80</sup> Escobar-Tello and Buller, 2014.

<sup>81</sup> Pidgeon and Barnett, 2013.

to this the many opportunities for interaction provided by the activities of social researchers (such as conferences and meetings with academic researchers), it is clear that by 2014 social research capacity in the broadest sense had come a long way in DEFRA since 2001.

It is also notable that throughout recent reconstitutions of the DEFRA Science Advisory Council (in 2011<sup>82</sup> and then again in 2013<sup>83</sup>), its membership continues to include social scientists who are interested in the framing of environmental policy issues and the interplay between different epistemological perspectives therein. It therefore seems that the council may continue the “challenge function” in the same spirit as its predecessors, although this is an empirical question that extends beyond the scope of this thesis, and requires further research. Next we will consider some remaining issues in DEFRA’s social research capacity.

## **5. Recent Developments**

It is clear that over the years significant barriers have been overcome in the expansion of DEFRA’s capacity for social research expertise. Through the ongoing efforts of internal scientists, social researchers, the Chief Economist, and external actors, the recognised potential for social research expertise to contribute to policy areas in DEFRA has expanded considerably.

Nonetheless, issues persist with regards to social research capacity in the department. First, some policy areas are not served by social researchers, and barriers remain there for engendering an appreciation of what social research could do for those teams. It is particularly noticeable that policy officials who

<sup>82</sup> DEFRA, 2011a.

<sup>83</sup> DEFRA SAC National Archives, 2015.



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have moved from policy areas rich in social research have not always demanded social researchers’ input in their new role in a different policy area nor have they been convinced that social researchers could contribute to that domain – suggesting that there remains work to be done, both internally and from the wider social science community, if social research is to contribute early in policy development across DEFRA.

In addition, all of the interviewees who were asked whether there is at present an epistemic hierarchy between the analytical professions within the department claimed that there is, and invariably reported that social research sits below natural science, economics, and statistics in that hierarchy. The hierarchy itself was variously described by respondents in terms of comparative numbers of analysts, the grade of those analysts, the amount of resources allocated to each profession, the preferential selection of types of analysis by policy analysts, and the ability to influence decisions.

Third, within some policy teams there remain remnants of the lack of appreciation of expertise that was identified in the SAC Social Science Sub-Group’s 2006 report.<sup>84</sup> This is particularly true of policy areas where social researchers are employed for the first time. One social researcher, whose post was funded directly by the Head of Profession and was based in a policy area with no prior history of employing social researchers, recalled that the policy team were initially sceptical of the utility and credibility of social research:

“They had no idea of what social science was, and they were very, very sceptical of the value of the social science... so do you know, there was this huge amount of work to do, to get them to think about what could possibly be valuable. So it’s much more about building relationships, trying to have a proof of concept of where social

<sup>84</sup> DEFRA SAC, 2006.

science can add value on quite a small scale, and so on... which means that you don't have a very immediate or direct impact on a policy."<sup>85</sup>

At the same time, and across a number of policy areas, demand for social research exceeds resources – especially in recent years as budgets have been particularly constrained. This, coupled with the still-present perception in some policy areas that anybody could commission social research,<sup>86</sup> poses another challenge for social researchers' epistemic authority, as is told by one interviewee:

"Well it's problematic when you have somebody commissioning a piece of work, completely from scratch without any social science input and they obviously have no idea of how to design a questionnaire or what is a meaningful answer to expect to get from a piece of social science, and like, what is the most appropriate method to get those answers... you know, if you don't really know that then you can waste quite a lot of money trying to answer questions."<sup>87</sup>

The situation poses a quandary for the social researcher in the policy team (who requested that the policy domain is not named for the protection of their working relationship). On the one hand, the researcher could argue that the research project should not go ahead, on the basis that it is unlikely to be credible – which ultimately could devalue social research within the department. On the other hand, the analyst could provide some basic input in order to maximise its quality as far as possible. In this case, the social researcher reluctantly opted to provide support to make the research projects as credible as possible.

Hence, in this particular case, a new recognition that social research can be useful for the team has not come hand-in-hand with an attribution of

<sup>85</sup> A DEFRA social researcher (5).

<sup>86</sup> As was forewarned by the DEFRA SAC Social Research Sub-group (DEFRA SAC 2006, p.9).

<sup>87</sup> A DEFRA social researcher (5).

exclusive ‘epistemic authority’ to the social researcher. That is to say, the use of social research has been identified without an appreciation of the symbolic value associated with using researchers’ expertise for commissioning such research. This is a surprise finding. Drawing on Boswell’s analysis of the functions of research in policy institutions,<sup>88</sup> the finding makes sense if these officials seek legitimacy not from a social science community but from other stakeholders, perhaps because they do not value the additional credibility that social scientists could potentially bestow on the work.

It is clear then, that while my respondents all acknowledge that recent structural changes (such as the employment of a social researcher at the level of the senior civil service, and also the rise in number of social researchers across the department) do suggest there is greater appreciation of the value of social research in the department, a range of challenges to social researchers’ contribution remain in some policy areas. But DEFRA’s social researchers are also better equipped to confront these issues than in the early DEFRA years. The embedded analyst model allows researchers to work closely with other analysts and policy teams to build a constructive relationship over time, which we have seen is considered important as a basis for providing a challenge function. There is, furthermore, an experienced and connected group of social researchers, who have strong leadership, influence over internal research strategy, a proven track record of contributing to policy development, experience of overcoming challenges to their epistemic authority and who benefit from wide-ranging internal and external support networks. So while there is still more to do to increase

<sup>88</sup> Boswell, 2009.

DEFRA's demand and capacity for social research, the department has clearly come a long way since its establishment in 2001.

## **6. Concluding the DEFRA Story**

The historical account presented in this chapter has highlighted how DEFRA's social research capacity has been constructed over the years. We have seen that the roles that social research plays in the department have changed considerably since DEFRA's establishment in 2001. Social research expertise is now recognised by many civil servants as having the potential to contribute to all policy areas at all stages of the policy development process. Its role is not limited to policy evaluation; there have emerged tangible, translatable examples of effective utilisation of social research at an early stage in policy development. Nor is its role limited to understanding rural communities; it has relevance across DEFRA's remit – from pro-environmental behaviours, to sustainable farming, to understanding the spread of epidemic diseases. Barriers do persist in influencing relevant actors' conceptions of the meanings, roles, and value of social research expertise. And while some of these barriers may be familiar to experienced social researchers, none is to be understated. Yet, the story that this chapter tells does suggest that such barriers also present opportunities for social research to grow.

As is now clear, changes in how social research is understood and how it is valued have been key to the expansion of research capacity in DEFRA. In turn, changes in social research's roles have influenced how the idea of social research is interpreted. In the first period, 2001-2005, we saw preliminary efforts to break down narrow conceptions of social research – where at best it

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was associated with elucidating and tackling the concerns of rural communities, and at worst it was viewed as the irrelevant work of rebellious academics who opposed the government. As such, many civil servants were sceptical of the value of social research, and were cautious to engage social scientists – despite ambitions from senior staff and natural scientists to elevate its status in the department.

By the end of 2008 though, a confluence of changes (a new supply of relevant academic behavioural research, pressures from the Chief Scientist and his staff and committees, support from the new Chief Economist and Director of Analysis, as well as newly established roles for social researchers) had begun to change some civil servants’ understanding of what social research is, how it could contribute across the department’s wide remit, and how useful and credible it could be. This led to the creation of further social researcher posts to support the development of policy and to consider the strategic evidence needs across the department. These changes helped to further raise the profile and translatability of (particular types of) social research insights. This then supported the case for new roles for social researchers, including senior civil service representation.

While there ceased to be a critical social scientist providing challenge on the SAC in 2011, in the same year a senior social researcher was employed with responsibility for ensuring that social research is valued across DEFRA’s wide remit. This new Head of Profession has identified and created further opportunities for social research to be utilised. With the clout of a senior civil servant, and a charismatic persona, the analyst has had a significant impact in opening up further the conceivable functions, perceptions, and meanings of social research. Despite a context of austerity, there are now approximately twenty social researchers working in diverse areas of

DEFRA's remit, there has been a proliferation of interpretations of social research (including in terms of understanding rural issues, influencing behaviours, action-based research, and policy evaluation), and social researchers' expertise and relevance are acknowledged across the department's wide remit. On the whole then, social research capacity has grown considerably since 2001.

Consistent with the lessons of finitism<sup>89</sup> we have seen that the perceived meanings, roles, and value of social research expertise in DEFRA have been open and responsive to change. In particular, we have seen that changes are contingent upon developments in the epistemic, institutional, and political contexts. Some of the contestation surrounding social research's contribution has settled, with the effect that topics where there was disagreement or a lack of clarity as to how social research could contribute are now seen as obvious or 'natural' areas in which capacity should be developed. Novel developments in the epistemic, political, and institutional circumstances will no doubt provide further stimulus for changes in social research capacity in the years to come.

It is also important to acknowledge that there was some variation amongst interviewees as to how to interpret the relative significance of different actors' efforts towards expanding social research capacity. Some stressed the importance of actors' continued efforts through long-term strategic processes as the most significant driver for the growth in capacity in social research expertise. This view is supported by some of the examples presented in this chapter – we have seen how different activities under the banner of developing the department's evidence and innovation strategy had

<sup>89</sup> Bloor, 1997, p.70.

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contributed, in multiple ways, to the emergence or mobilisation of new perceived meanings, roles, and value of social research expertise. Others do not deny that this contributed to the story. Yet, they emphasise more strongly the importance of actors operating in a more response-driven mode to make persuasive cases for social research capacity with the support of charismatic and influential individuals such as those on the SAC, in the Science Directorate, the Chief Scientist, the Chief Economist, and the Head of Profession for Social Research. This chapter has shown strong evidence that such short-term opportunism was important too. Rather than being drawn on the matter of whether the longer term strategic moves are more significant than responsive and serendipitous actions, it is more interesting to observe that on both accounts a crucial element is present: the provision of challenge as a mechanism for changing how social research expertise is perceived.

The provision of challenge has been a core driver in the events presented in this chapter. The challenge of civil servants’ ideas about social research has given rise to a dynamic epistemic context in DEFRA in which new interpretations of the meanings, roles, and value of social research gain traction.

How does the development of social research capacity in DEFRA compare with that in DECC? As will be clear by the end of the next chapter (and as will be further elaborated upon in Chapter 8), despite being a younger department DECC’s history of social research capacity is remarkably similar to DEFRA’s.

## Chapter 5

### Social Research Capacity in DECC

“So I asked myself what would be the most useful thing to do to send out a message that policy teams needed to have social sciences expertise. If one is thinking in terms of steps: the first step is acknowledging that behaviour change is what we do as government departments. The second step is to recognise the kind of expertise/knowledge needed to develop policies that will enable behaviour change. And when, internally, we took those steps, we then got the expertise that we needed in. And the final step was saying ‘OK, now that we have the expertise, the people who have subject knowledge in the social science area, how do we use those most efficiently to help develop better policies?’ – and that bit is still a work-in-progress.”

- DECC’s former Head of Science

#### 1. Introduction

**W**HEN DECC was formed in 2008, no government social researchers were employed. This is interesting given that by then, as we have seen, social research expertise was valued in DEFRA, and was used to develop ideas for reducing carbon emissions associated with consumption and production. And it is particularly surprising given that DECC was created through the bringing together of DEFRA’s climate change teams with the energy teams from the Department for Business, Enterprise and Regulatory Reform (BERR). Given these connections, we might have expected that the perceived meanings, roles, and value associated with social



research would have been translated in a straightforward sense from DEFRA, along with some tangible capacity. But this chapter reveals that while some translation took place, to a large extent DECC’s social research capacity was developed endogenously, and tailored to the specific epistemic, institutional, and political circumstances within DECC.

This chapter thus mirrors its predecessor by showing how DECC’s social research capacity was developed over the years, such that by the time interviews were conducted there were approximately twenty social researchers within DECC, supported by a network of external academic researchers. Once again, I show that it is through the use of *challenge*, on the part of various actors within and outwith DECC, that social research capacity has come to take the form it has.

The chapter proceeds as follows. Section 2 begins by describing how DECC was formed and its remit was framed. It goes on to explore how key actors conceived social science expertise in relation to this new department’s remit and explains how the department came to recruit its first social scientists in 2010. The next couple of years saw those researchers decide their priorities and build their own teams, which is the focus of Section 3. The fourth section then explores how these social researchers worked with others within and around DECC to expand their capacity to use social research through engaging more widely with social science expertise. The chapter concludes with some reflections on DECC’s social research capacity today, and how its history compares with that of DEFRA.

## 2. 2007-2010: Constructing DECC Ontologically and Epistemically

The Labour Government's decision to form a new Department of Energy and Climate Change came as a surprise to many of DEFRA's senior civil servants.<sup>1</sup> It was widely expected, according to DEFRA's former Chief Economist and Director of Analysis, that the energy teams from BERR would join DEFRA:

"What we actually expected to happen was that DEFRA, having established its credibility as a serious economic department, would then take on responsibility for energy policy from what was then DTI [Department of Trade and Industry]<sup>2</sup> – now BIS [Department for Business, Innovation and Skills]. So it caught most of us by surprise when Gordon Brown decided that he'd created this new department with Ed Miliband at the head. That said, by that stage we had firm enough foundations analytically, aligned to each of DEFRA's policy remits, to just be able to split off the climate change mitigation analytical capacity into DECC, but also keep working well across the new departmental boundaries. Of course we felt we'd done a lot to strengthen DEFRA to take on energy making government simpler and better. But in the end political imperatives came first and we made the unexpected outcome work."<sup>3</sup>

The efforts to strengthen DEFRA's economic analysis referred to by this interviewee were part of the 'Renew Defra' restructuring project, which took place in 2006-07, as discussed in the previous chapter. While these changes were in their infancy, the Parliamentary Environmental Audit Committee reported that DEFRA had limited success in making the economic case for including consideration of sustainable development across government decision-making processes.<sup>4</sup> The Committee concluded that the formation of

<sup>1</sup> Kinver, 2008.

<sup>2</sup> More precisely, DTI's energy policy teams were part of BERR before moving to DECC.

<sup>3</sup> DEFRA's then Chief Economist and Director of Analysis.

<sup>4</sup> Environmental Audit Committee, 2007, p.Ev15.

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a new department, run by a Secretary of State with responsibility for political leadership across government, would help to produce more coherent policy management in government.<sup>5</sup> This was also said to be Gordon Brown’s preferred course of action, who chose Ed Miliband to be the first Secretary of State for Energy and Climate.

A process of negotiations followed to settle which DEFRA teams should move to the new department. As one former DEFRA civil servant recalled:

“The problem when you create a new department is that you don’t get any of the aligned support functions that need to go with it. People give you the minimum that they can get away with. So you don’t get lots of cross-cutting bits. ...DEFRA sort of hung on to most of the bits. Slightly grudging in what we gave to DECC anyway.”<sup>6</sup>

The retention of some teams in DEFRA was rationalised on the grounds that they still fitted within DEFRA’s newly defined remit and/or had direct links with other policy areas within the department such that separating them would duplicate work or create unnecessary barriers. DECC thus emerged with most of the responsibility for climate change, while resources that were said to support work on environment or sustainable development issues were kept in DEFRA – for example mitigating agricultural greenhouse gas emissions, UK climate change adaptation (such as flood defence measures), and work on promoting more environmentally-friendly behaviours amongst the public. The team that focused on energy-using appliances did not move to DECC until 2014.<sup>7</sup>

In striking contrast to the formation of DEFRA, references to social science or to understanding citizens were absent from incumbent politicians’

<sup>5</sup> Environmental Audit Committee, 2007, p.41.

<sup>6</sup> A DEFRA policy official (1).

<sup>7</sup> HM Government, 2014b.

discourse at the time.<sup>8</sup> In the case of the sustainable consumption and production team (whose social research on pro-environmental behaviour change amongst the public was by now highly regarded within the department), DEFRA's officials argued that the team held a cross-cutting role. The analysts were represented as important to the department as a whole – not just for the staff working on climate change. Thus the social researchers within the Sustainable Behaviours Unit, which was situated within the sustainable consumption and production team, would stay put:

“[The Sustainable Behaviours Unit] was like a small analytical team – you didn't, say, have one social researcher working in the Climate Change team. It was covering a broader area of stuff. And therefore it just didn't go with the people.”<sup>9</sup>

From DEFRA, then, came climate change teams that focused on greenhouse gas emissions but lacked the social research expertise which had recently gained a footing in the department.

From BERR came the energy teams, who held responsibility for energy generation and supply networks. These teams' remits were described by respondents as having been framed along predominantly economic and engineering lines – with no social researchers embedded in the teams, and for a long time they were situated in a department “with no meaningful social research capability”.<sup>10</sup>

DECC was thus established in October 2008 with: climate change teams divorced from sustainable development and environmental stewardship, energy teams in which economic and engineering perspectives historically

<sup>8</sup> Based on an analysis of press articles retrieved via online searches for the period 2007-2009. See, e.g., Kinver, 2008; Vidal and Jowit, 2008.

<sup>9</sup> A DEFRA social researcher (6).

<sup>10</sup> A DECC official who joined from BERR's energy teams.

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held epistemic dominance, an overall lack of social research capacity across the organisation, and new political and civil service leadership. Consequently, while part of the rationale for setting up DECC was to integrate energy and climate change teams to enable more coherence in policy-making, in fact we see that, at least initially, the department’s formation marked an epistemic reframing of climate change policy along economic lines. This was summarised by a respondent as follows:

“And then DECC deliberately pursued a differentiation strategy, to make clear that they were an economic department and not just an environmental department.”<sup>11</sup>

This shift is reflected in the department’s three original Departmental Strategic Objectives (DSOs), which were inherited from DEFRA and BERR: “to lead the global effort to avoid dangerous climate change”, to work with others so that “climate change [is] tackled internationally and through domestic action to reduce greenhouse gas emissions” and “to ensure the reliable supply and efficient use of clean, safe and competitively-priced energy”.<sup>12</sup> Through subsidiary targets we see that these objectives were interpreted in predominantly economic and engineering terms – as commitments to growing ‘global carbon markets’, ‘reducing the greenhouse gas and CO<sub>2</sub> intensity of the UK economy’, bringing down ‘energy consumption’ in the UK or securing the ‘competitiveness’ of energy prices. The language of these objectives and targets is notably different from some of DEFRA’s DSOs, which emphasised ‘sustainable development’, and a

<sup>11</sup> A DEFRA policy official (1).

<sup>12</sup> National Audit Office, 2009, p.7.

‘resilient’ economy and society, and which could have been transferred to or shared with DECC.<sup>13</sup>

DECC’s DSOs were then updated in late 2009,<sup>14</sup> in a move that further cemented the economic framing of the department’s remit – with a narrow focus on greenhouse gases isolated from broader considerations of sustainability. DECC’s objectives were now to: ‘secure global commitments which prevent dangerous climate change’ ‘reduce greenhouse gas emissions in the UK’, ‘ensure secure energy supplies’, ‘promote fairness through climate and energy policies at home and abroad’ (by reducing the proportion of households spending more than 10% of their income on energy bills, securing low prices for energy consumers, and taking into account the ‘shadow price of carbon’ in new policies),<sup>15</sup> ‘ensure that the UK benefits from the business and employment opportunities of a low carbon future’, ‘manage energy liabilities effectively and safely’ and ‘develop the Department’s capability, delivery systems and relationships so that it serves the public effectively’.<sup>16</sup> In this way, the department began with a relatively limited focus on energy consumption and energy supply, and sought the most cost-effective means to reduce UK carbon emissions – divorced from the broader environmental implications of those courses of action.

Moreover, many interviewees pointed out that there remained, even at the time of the interviews, an open question as to whether the new department really did enable more coherent integration between the energy and climate change portfolios. It was pointed out that even then there was a fault-line

<sup>13</sup> DEFRA [National Archives], 2007.

<sup>14</sup> National Audit Office, 2009, p.36.

<sup>15</sup> National Audit Office, 2009, p.36.

<sup>16</sup> National Audit Office, 2009, p.37.

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through the department, with minimal interaction occurring between the former DEFRA teams and the former BERR teams:

“So you’ve got a situation where you got these two halves of DECC, and broadly the sort of Energy bit, and then the Energy Efficiency/Climate Change bit. So there’s the bit which came from DTI [the predecessor to BERR], which is the energy policy bit, and you’ve got a bit which came from DEFRA – so I think it’s an interesting question to ask whether social sciences are across that, they are certainly on the Energy Efficiency side.”<sup>17</sup>

This division is most visible if one looks at the first available version of the department’s organisational chart (see Appendix 4, Figure A4-1). The ‘Energy, Markets and Infrastructure’ Directorate consisted of teams from the former BERR, while the ‘National Climate Change and Consumer Support’ Directorate was comprised of teams from DEFRA. This divide is not just interesting to note, but as the interviewee suggests, it also had implications for how social research would be integrated in the new department and what roles the researchers would come to play. The institutional arrangements would have epistemic consequences.<sup>18</sup> We will see this more clearly in the following sections.

With core aspects of the department settled, DECC appointed Professor David Mackay as its first Chief Scientific Advisor in October 2009.<sup>19</sup> He then formed a Science Advisory Group (SAG) comprised of academic and industry researchers in July 2010.<sup>20</sup> This was an interdisciplinary committee of experts, composed of engineers, natural scientists, economists, and one academic social scientist. The social scientist had spent much of his career

<sup>17</sup> A DECC policy official (1).

<sup>18</sup> Consistent with the literature discussed in Chapter 3 – e.g. Walker, 1987; Gummett, 1980.

<sup>19</sup> DECC, n.d.-a.

<sup>20</sup> DECC [National Archives], 2012.

researching public attitudes to scientific issues, including climate change. He had recently discussed with DECC's scientists the issue of public trust in relation to the recent 'Climate-Gate' affair, in which the emails from researchers at the University of East Anglia were leaked and presented as evidence of scandal in science. This social scientist explained in an interview that it was on the basis of such conversations with DECC's officials that he was appointed to DECC's SAG. Interviewees reported that social science played a relatively marginal role in the topics discussed by the SAG, with little explicit concern paid to the department's capacity for social science expertise. And although the social scientist in the SAG did encourage public engagement and openness in decision-making processes, there was nobody who adopted the critical role of the Professor of Science and Technology Policy in DEFRA's Science Advisory Council – challenging assumptions and problem-framings from a social science perspective. This role (and others) would be reprised more prominently by the social scientists who were later appointed to the DEFRA-DECC Social Science Expert Panel, and which we will consider in more depth in Section 4 of this chapter.

Against this ontological and epistemic backdrop then, we can now examine how the new department came to establish its social research capacity. The following subsections explore how the cases for specific roles for social researchers were made during the early years of the department.

## 2.1 'A Large Clean Slate' for Social Research

So far, we have noted that DEFRA retained its social research community while other teams were transferred to DECC, such that the new department was formed with no social researchers in October 2008. Over the next year,



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various individuals attempted to persuade DECC’s senior officials to recruit social researchers for the purposes of instrumentally contributing in policy development.<sup>21</sup> DEFRA’s social researchers raised concerns to the then Head of the Government Social Research Service, who was based in the Cabinet Office, and who then wrote to DECC. A DEFRA social researcher recalled:

“At the time, the Head of GSR wrote to the Permanent Secretary of DECC, saying ‘how about getting some social researchers because you can’t do what you want to do without them’.”

Interviewer: “And what was the response to that?”

“The response was something along the lines of ‘we’ve got it covered for now but we’ll look at it in the future’. ...I think the real question was quite why it took so long to get social researchers established in DECC... Because you would have thought they’d address it. Because I did say, they had to be written to; they could have addressed it sooner than what they did.”<sup>22</sup>

In addition to the case made by DEFRA’s social researchers and the Head of the Government Social Research Service, DECC’s own Head of Science made a very specific case for social research expertise in terms of understanding public behaviours:

“I did make a point at the time DECC was created that we had no social scientists in the new Department. At that time, we had lots of people like me - physical scientists - and lots of economists, but no social scientists. It soon became apparent that many of the policies that DECC wanted to pursue such as energy demand reduction, energy efficiency etc. could not be done by just taking a narrow economic perspective or a physical scientific perspective. Energy efficiency was about people and behaviour change. It took a while for the penny to drop that that was a gap in the Department’s capability. We had left all the social scientists behind in Defra when DECC was created. Although economists had their area of expertise, their understanding of human behaviour was necessarily quite simplified. So, for example, the expectation was that the Green Deal or some other policy on energy efficiency would work because over the long-term there would be a financial benefit

<sup>21</sup> Boswell, 2009, p.29.

<sup>22</sup> A DEFRA social researcher (6).

that would accrue to an individual who takes energy efficiency measures. That was what was shown by the various McKinsey cost curves and such analyses. However, the reality was that people didn't take up the measures because of the high upfront costs. So many policies in DECC were based on fairly simple notions of behavioural change based on individuals directly responding to economic incentive... Although very soon, in less than a year, senior managers in DECC realised that without social science input, a lot of the policy – especially on the energy efficiency, would not work without a richer understanding of how people can change their behaviours.”<sup>23</sup>

An instrumental case for DECC to create roles for government social researchers was therefore being voiced not only externally, but also by the department's own Science and Innovation Group. And, as is clear from the above quotation, the delineation of this case was heavily path dependent – the meaning of social research being invoked was grounded in the experiences and understandings of those who worked with social research in DEFRA. Thus, the dominant rationale for employing social researchers was based on their expertise in understanding behaviour change. The idea of a social research agenda in the former BERR side of the department, which had no history of employing social researchers, was less apparent at this point.

Despite multiple attempts, the case for recruiting social researchers – even for behaviour change research in particular – was initially rejected by senior officials in DECC. On the account of a former Head of the Government Social Research Service, this was because the Permanent Secretary personally opposed the idea. This interviewee had previously worked in the same department as the Permanent Secretary, and the acrimony between them may help to explain the latter's reluctance to include social research capacity on the first day. This point could not be confirmed nor rejected in subsequent interviews, but it is nonetheless clear that if DECC was to develop its own community of social researchers then a more compelling case would need to

<sup>23</sup> DECC's former Head of Science.

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be offered to explain why social research should be valued by the department.

Now aware that a recruitment process for social researchers would not be forthcoming, DECC’s Head of Science approached DEFRA’s social researchers, who formally agreed to serve DECC’s policy teams’ requirements too – a surprising exception to the Permanent Secretary’s stated conviction that “DECC had to be a department that wrote its own cheques”.<sup>24</sup> The agreement failed to bear fruit however. DEFRA’s social researchers were in high demand within DEFRA and in prioritising their own department’s needs above those of another’s they were unable to deliver on their agreement:

“So because they had their priorities, our requests from DECC for social science support always seemed to get “bumped down”. So after a while, we thought we needed our own in-house team.”<sup>25</sup>

The case for DECC to have its own social research capacity gained a boost of credibility in December 2009, when the then Cabinet Secretary and Head of the Home Civil Service, Sir Gus O’Donnell, delivered the department’s first *Capability Review*.<sup>26</sup> The reviewers set the department’s civil servants and stakeholders a range of questions to evaluate its leadership, strategy and delivery capabilities, including questions about whether the department “base[s] choices on evidence”.<sup>27</sup>

<sup>24</sup> A DEFRA policy official (1).

<sup>25</sup> DECC’s former Head of Science.

<sup>26</sup> Cabinet Office, 2009.

<sup>27</sup> Cabinet Office, 2009, p.13.

This document, produced by the highest ranks of the civil service, reinforced the Head of Science's case for acquiring behaviour change expertise:

Stakeholders and staff told us that DECC's knowledge of customers is weak and the Department is badly in need of social and behavioural research capability. The Department recognises that an in-depth understanding of consumer behaviour and how to influence it is an essential prerequisite for meeting the consumer-related targets on climate change.<sup>28</sup>

The review carried considerable weight and was described as significant by multiple civil servants as a key document – akin to a “Head Teacher's report”<sup>29</sup> on one account. Senior civil servants accepted the recommendations in full.<sup>30</sup> It was now acknowledged amongst senior staff that social and behavioural research would be useful particularly in aiding policy teams to think about how to encourage the public to reduce their energy consumption.

Intriguingly, while DECC's review was being conducted, the capability reviews team was also updating the procedure for future assessments.<sup>31</sup> After encouragement from a new ‘Customer Insight Forum’ in the Cabinet Office,<sup>32</sup> the next round of assessments would place greater emphasis on a department's use of ‘customer insight’, with the strategic capabilities criteria reworded to include questions about whether the department in question “base[s] choices on evidence and customer insight”. Before we can understand how DECC's first *Capability Review* contributed to a significant change in the department's capacity for social research expertise, we must

<sup>28</sup> Cabinet Office, 2009, p.8.

<sup>29</sup> A DECC social researcher (3).

<sup>30</sup> Cabinet Office, 2009, p.11.

<sup>31</sup> Cabinet Office, 2009

<sup>32</sup> Cabinet Office, n.d. slide 11.

first consider the relationship between ‘customer insight’ and government social research, as described by the ‘Customer Insight Forum’ and the Government Social Research Unit, both led from the Cabinet Office. In doing so, we will see that the *Capability Review* did not provide as clear-cut a case for the recruitment of government social researchers as it might seem at first glance.

## 2.2 Customer Insight or Social Research Expertise?

While the extract from the *Capability Review* at the end of the previous subsection presents ‘knowledge of customers’, ‘social and behavioural research’ and ‘an in-depth understanding of consumer behaviour and how to influence it’ as the same type of expertise, there were now two distinct civil service groups of specialists who claimed to possess relevant expertise in this area: ‘customer insight’ specialists on the one hand, who were part of the Government Communications Network (GCN), and government social researchers on the other. It is important to understand how distinctions between social research and customer insight are drawn in government in order to understand subsequent developments in DECC.

The Customer Insight Forum (who tasked themselves with embedding ‘customer insight’ across government departments) defines customer insight in contradistinction to social research, as follows:

Customer insight is not raw customer data. Nor is it the same thing as social research although it may be sourced from qualitative or quantitative research studies. Insight cannot be ‘bought’ off the shelf. There is a gap between customer

data, traditional social research and what we call 'insight'; there is a leap that must be made to bridge it.<sup>33</sup>

'Customer insight', then, is presented as a more tacit and yet 'deeper' understanding about customers than is found in research findings. It is "a deep truth about the customer" which "'rings bells' with target people".<sup>34</sup> The Customer Insight Forum claims that customer insight should serve a reminder to officials that citizens have rights and expectations related to public services and that these should be taken into account by government as if its services are not provided by a "monopoly".<sup>35</sup>

Here we can see an important difference in the way customer insight specialists and government social researchers' identities are formally defined by their supporting bodies. The role of customer insight specialists is described as *empowering* citizens by enabling citizens' views and needs to directly inform policy ideas in such a way that resonates with citizens,<sup>36</sup> while social researchers are more concerned with *understanding* social phenomena.<sup>37</sup> Still, as government employees, customer insight specialists are, like social researchers, expected to commit to the Civil Service Code,<sup>38</sup> and are particularly careful to not cause any embarrassment to the department or its ministers. As such, both groups face similar difficulties in terms of gaining traction for their perspective within government organisations.

<sup>33</sup> Cabinet Office, 2006, p.9.

<sup>34</sup> Cabinet Office, 2006, p.9.

<sup>35</sup> Cabinet Office, 2006, p.7.

<sup>36</sup> Cabinet Office, 2006, p.6.

<sup>37</sup> Analytical Coordination Working Group, 2011, p.2.

<sup>38</sup> Civil Service Commission, 2014.

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A second difference between the two groupings concerns their methods. While customer insights may emerge from empirical quantitative or qualitative data, other sources are also used, including the narratives of those with first-hand experience in service provision, salient media stories and anecdotal experiences.<sup>39</sup> As a result, some civil servants have come to view customer insight as a less methodologically robust form of knowledge than social research:

“And within government, people would look at social researchers as somehow possessing of more intellect and somehow more robust credentials. And customer insight was a little fluffy, a little bit softer really.”<sup>40</sup>

Last, social researchers view themselves as government analysts and take their commitment to providing a ‘challenge function’ “seriously”<sup>41</sup> – as noted by a DECC policy official.<sup>42</sup> By contrast, customer insight specialists and their support network do not describe their role in terms of providing challenge.

Hence, while social researchers and customer insight professionals each make claims to expertise in understanding and influencing behaviours, there is some potential for tension as well as collaboration between them. And the *Capability Review* left open the question of which body of expertise should fill the gap – leaving the decision in the hands of DECC’s officials.

Reportedly inspired by his prior experience in an organisation which had a ‘Customer Insight Team’, the Director General for the National Climate Change and Consumer Support Directorate at the time opted to build a Customer Insight Team (CIT), led by a Head of Customer Insight who was

<sup>39</sup> Cabinet Office, 2006, p.10.

<sup>40</sup> A social researcher in DECC (1).

<sup>41</sup> A DECC policy official in the Smart Meters Implementation Programme team.

<sup>42</sup> See also Kattirtzi, 2016.

recruited from industry. As is clear from the differences between social research and customer insight discussed above, this is not quite what civil servants were arguing for in 2008/9, and would not necessarily help to build social research capacity. But as a matter of chance, the formation of the CIT did contribute to the development of DECC's social research capacity, as we will see in the next subsection.

### 2.3 Customer Insight *and* Social Research Expertise

The Head of Customer Insight (HCI) was employed from a research company in June 2010. This was just after the election of a Conservative-Liberal Democrat Coalition Government in May, in which Chris Huhne was made Secretary of State for Energy and Climate Change.<sup>43</sup> As an external appointee, the HCI did not have GSR accreditation, and since this was not formally designated as a GSR post, attaining GSR accreditation was not a priority – nor was any accreditation by the Government Communications Network necessary for customer insight specialists. But the HCI did have a well-regarded track record of applying social research methods in the private sector, and had previously worked on social research projects for DEFRA and other government organisations.

Concurrently and independently of the events leading to the formation of a CIT, a case for a different interpretation of social research's contribution was being made. The Deputy Head of Economics was concerned that the department was not evaluating its policies and recognised that, alongside economists, social researchers also claim expertise in evaluation. An experienced government social researcher was soon recruited from the

<sup>43</sup> BBC News, 2010b.



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Cabinet Office’s Government Social Research Unit, where she had spent a few years developing guidance for GSR members across Whitehall, and had a particular interest in evaluation methods. She joined the department in May 2010 as Head of Policy Evaluation (HPE) and, as the department’s first social researcher she also became the Head of Profession for Social Research.

Very soon, the HCI and the HPE saw eye-to-eye:

“And basically, not to put too fine a point on it, we kind of met and realised that we probably saw the world in the same way, and that there was relatively little point splitting the difference between social research and customer insight. Because basically, I see it as a spectrum – there’s a big overlap in the middle, in terms of the type of work that gets done, and then there are some things that social researchers do that customer insight people don’t do, mainly around policy evaluation, and there are some things that customer insight people do that social researchers don’t do, primarily around getting involved in helping to inform communications – although some social researchers will do that too – and also around what I would describe as capability-building, which is really trying to basically get the organisation to *think people* more readily than it already does. Essentially the core picture is customer insight and social research are the same thing – which is that it’s about helping policy-makers understand people and organisations and communities and why they think and feel and behave the way they do. And to use that evidence and insight to lead to better policy-making and ultimately to better outcomes. It’s virtually the same pitch, really.”<sup>44</sup>

As we saw in the introduction, DECC’s responsibilities had been framed in largely economic and engineering terms. In this context, these two actors saw a common cause: to get the organisation to *‘think people’* more.

In the context of limited resources, the fact that the HCI and HPE shared an analytical perspective and also a commitment to quality through robust research methods enabled them to work together to build social research (and customer insight) capacity across the department. Supported by the weight of the *Capability Review* and a mutual understanding between them,

<sup>44</sup> DECC’s former Head of Customer Insight.

the department's two 'social scientists'<sup>45</sup> could go on to expand the department's social research capacity.

In this light, some respondents argued that starting with a clean sheet of zero social researchers was in fact advantageous. In building up a team from scratch, DECC's social research community could be developed to suit the department's particular requirements. Its perceived meanings, roles, and value could be moulded to fit the perceived needs of the department:

"I think we've been lucky in DECC in that because we started off with a zero-base we've been able to start with a large clean slate and then identify where we think there's value in doing social research. And it then being useful, and people seeing that it's useful, and other people are wanting it and so it's kind of built up rather than something people think they have to do – there is a genuine want to do it now. And that's been really useful. And that's how our culture has developed."<sup>46</sup>

But the transformation described by the respondent was not straightforward. So far, specific interpretations of social research had gained traction amongst DECC's officials – particularly with regards to consumer behaviour change and the designing of policy evaluations. The HCI and HPE would now have to build their teams and prove the value of their expertise. How they went about doing this is the focus of the next section.

### **3. 2010-2014: Building Social Research Capacity in the Customer Insight Team and Policy Evaluation Team**

Having established a working relationship, the HCI and HPE gradually began to build social research capacity in DECC over the next couple of years – by making social research meaningful to officials across the department,

<sup>45</sup> Many social researchers called themselves and each other social scientists.

<sup>46</sup> A DECC social researcher - Head of Policy Evaluation.

creating new roles for researchers, proving the value of research. As we might expect following the previous chapter, achieving support from senior officials, scientists, and economists helped to establish a social research capacity in DECC, but the case would still need to be won amongst specific policy officials. The HCI and HPE began in their roles with no budget of their own – and while this was certainly limiting for them, it also meant that their success relied upon their working together with other officials to define research projects that would be seen as relevant and valuable to policy teams.

To identify possible research needs and priorities, the two social scientists met with each policy team soon after starting at DECC.<sup>47</sup> They decided to prioritise work for those proposals included in the Coalition Agreement<sup>48</sup> – such as the Green Deal and the installation of smart meters in UK homes – which were treated as high priority within the department and were being developed at high pace and intensity (both examined in depth in Chapter 7).

Intriguingly, by the time interviews were conducted, specialists and generalists described the two teams of analysts as a single coherent community of approximately 20 social researchers/customer insight specialists, with many individual researchers (but not all) self-identifying as a member of one collective community rather than distinguishing between them. But originally, the two analysts forged an amicable demarcation between their remits: the HPE and the Policy Evaluation Team that she would build (henceforth ‘PET’) focused on designing and delivering policy evaluation, while the CIT would support teams to use social research at earlier stages in the policy process – for the design, delivery, and implementation of policy ideas.

<sup>47</sup> Government Office for Science, 2012, Annex A: p.23.

<sup>48</sup> HM Government, 2010.

They also set out to build their teams in different ways. The HPE was based in the Deputy Chief Economist's analytical team, and proceeded by making the case for policy teams to fund their own evaluation projects, arguing that the studies would be in the interest of improving the policy work in the given area. As such, she gradually built a network of social researchers across different policy teams in DECC. She could also bid into the economists' budget for methodological projects with no one policy team in mind. They initially focused their efforts on developing evaluation strategies with the Green Deal and smart meters teams,<sup>49</sup> but as their capacity expanded from 2012 onwards they engaged policy teams across the department, including those working on energy market reform and international climate change work.

By contrast, the HCI was, from the start, situated with the department's 'flagship' Green Deal team. There, officials had identified an immediate need for a deeper understanding of their potential customers. The HCI was eventually allocated her own budget in 2012, but in the meantime she would need to bid for funding from the Green Deal team, other policy teams, or alternatively try the Chief Economist's and Head of Science's budgets. She took a flexible approach to building the CIT, by either embedding a researcher in a policy team if a full-time analyst was required for an extended period of time, or else generalists could resource her CIT to carry out specific projects. The latter arrangement meant that the CIT could play a cross-cutting role across the department despite being situated within the Green Deal team.

<sup>49</sup> Government Office for Science, 2012, Annex A: p.44.

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During the first couple of years, the CIT worked mainly with those teams who focused on the Coalition Government’s new initiatives – particularly for energy efficiency and energy demand, such as the Green Deal, smart meters, and the renewable heat incentive. But as the team expanded – and in conjunction with the HCI gaining a budget and creating a contracting framework for research projects – the CIT could, from 2011 onwards, broaden the role it played in the department. They did this by working with a greater variety of policy teams (including those for nuclear energy,<sup>50</sup> district heating,<sup>51</sup> and heat strategy<sup>52</sup>), commissioning more foundational or longer term research projects which were intended for strategic purposes rather than immediate policy relevance (akin to those produced in DEFRA’s sustainable consumption and production team),<sup>53</sup> and building capacity to use social research insights across the department (as will be explored in more depth in Subsection 4.1).

By the end of 2013, recognition for both aspects of social researchers’ expertise had grown substantially, with approximately nine policy evaluation researchers embedded in policy teams across the department, and 11 members in the CIT (most of whom were also accredited government social researchers).<sup>54</sup> The Deputy Head of Customer Insight was one of these accredited government social researchers, and in mid-2013 was made Joint-

<sup>50</sup> For instance, a recent public engagement exercise in which members of the public were invited to inform the development of a White Paper on decision-making processes regarding geological disposal of nuclear waste (Icarus, 2015) has been cited by a researcher as a particularly important example where social researchers have enabled citizens to substantially influence decision-making processes in DECC (Sciencewise, 2016), and is viewed as potentially setting a precedent for working with policy-makers on energy infrastructure issues.

<sup>51</sup> E.g. DECC, 2013a.

<sup>52</sup> See Brook Lyndhurst, 2012. Work on heat strategy is discussed further in Chapter 7.

<sup>53</sup> Such as this study on non-domestic energy use: DECC, 2012a.

<sup>54</sup> As reported by a social researcher in DECC (4).

Head of Profession for Government Social Research along with the HPE. And notably at the time of interviewing, the HCI reported that the CIT had worked with every policy team, in some sense, at least once so far. The next subsection goes some way to explaining this relatively rapid growth, by highlighting how social researchers secured an appreciation of the value of their work from colleagues.

### 3.1 Valuing Social Research Expertise in DECC

In what has been described as a heavily ‘technocratic’ department,<sup>55</sup> where engineering, scientific, and economic forms of knowledge (and quantitative methods in particular) are dominant, it is striking that DECC’s social researchers have not experienced a great degree of challenge or resistance from colleagues over the robustness of social research methodologies. This seems to be due to a combination of factors, which are considered in this subsection.

First, the HCI and HPE ensured that officials and researchers were in agreement over what social research could deliver in a given project, and this managerial oversight ensured that the senior researchers who delivered tasks for policy teams encountered little contestation over what they should be doing or the value of their work or experience, as one former researcher in the CIT recalled:

“There were very good links between [the HCI and] the people who were leading up the other teams – and it was very integrated. So kind of from the top, [the HCI] had a very good idea of what she felt we should be doing to be answering the needs

<sup>55</sup> MacKerron, 2009, p.87.

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of everybody else. So you had a much clearer steer of what was needed – and it was clearer to us because there was that much better kind of join up.”<sup>56</sup>

Second, the HCI and HPE had taken a few steps to secure their teams’ reputations across the department as being committed to producing research of the highest quality possible. To this end, they both ensured members of their teams would commit to the GSR Code,<sup>57</sup> and aimed to build their respective teams by mainly recruiting accredited social researchers for designated social research roles (alongside roles which either lacked a research component and were identified for customer insight specialists, or require expertise in a different type of analysis). Furthermore, the HCI and HPE’s teams would support each other – for instance, if a social researcher is working on a policy evaluation project for a team, they would be encouraged to explore broader ways in which social research could contribute to that team, thereby potentially creating projects for the CIT, and vice versa. The CIT and PET also helped each other by peer reviewing each other’s outputs. Last, the HPE set up an interdisciplinary Evaluation Board of Experts (which included the Chief Economist and Chief Statistician) to identify priority projects and to review their work,<sup>58</sup> and likewise the CIT had an Evidence Board to review their projects.

These efforts to ensure validity in their work and build appreciation for their expertise coincided with a cross-departmental drive towards improving analytical capacity which included the formation of a new Research and Development Approvals Committee. Despite the HPE not yet becoming a

<sup>56</sup> A social researcher in DECC (2). Although working closely with policy teams did involve some negotiation to produce research products which would be seen as credible – see the section on the heat strategy in Chapter 7 for an example of this.

<sup>57</sup> GSR Unit, 2009.

<sup>58</sup> Government Office for Science, 2012, Annex A, p.51.

senior civil servant, she and the HCI were both included on this committee. This body of officials was described by interviewees as doubly important for shaping how colleagues perceived the quality and value of social research. It enabled them to challenge their colleagues' assumptions about social research and thereby highlight the importance of including a social research component. Moreover, it enabled them to receive feedback from other analysts in the department, who would then not only provide their analytical challenge on a given proposal, but also learn about the project, gain an interest in its findings, and in some cases explore opportunities to work together. The HPE summarised the importance of this committee thus:

"So even if it's a piece of modelling work there's still social scientists sitting round that table – so myself and the Head of Customer Insight sit around that table and give our opinions on it. And I think that's *really* adding value to the quality of the work that we're commissioning. And equally getting some kind of – a core bit of social science and getting the economists and scientists to say 'really?' and question it and inquisite it again really adds value. So that's – from an analytical point of view I think we really are working quite well in our multidisciplinary way."<sup>59</sup>

As with the social researchers in DEFRA's Centre of Expertise on Influencing Behaviour, interviewees emphasised the importance of two-way challenge between social researchers and their colleagues.

All of these steps helped to secure an appreciation of the social researchers' expertise from other officials in the department and, for the CIT in particular, served to distance the team from negative perceptions over customer insight elsewhere in government. A former social researcher emphasised the CIT's stress on the importance of quality in the research they produced:

<sup>59</sup> DECC's HPE.



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“Even though [the HCI] wasn’t a member of the Government Social Research Service at the time, it was a very evidence-focused team. And there was a massive focus on quality and you know, it was an analytical team.”<sup>60</sup>

The HCI herself chose to gain accreditation in winter 2013. As she was more senior than the HPE and her Deputy at the time, this also meant that she would become the Head of Profession for Social Research. She held this post until she left in mid-2014.

In addition to the collaborative approach from the social researchers’ team leaders and the simultaneous building of internal appreciation of researchers’ expertise, another factor that helped to influence the growth of social research capacity in DECC was an unprecedented level of appreciation for behavioural research across government. This was typified by David Cameron’s creation of a Behavioural Insights Team (BIT) in July 2010.<sup>61</sup> This group of behavioural experts was situated in the Cabinet Office, with a budget and a remit to design and deliver research projects in collaboration with government bodies. In this context, DECC’s ministers and policy officials were eager to show that the department utilised behavioural research, especially the quantitative trials advocated by the BIT. Ed Davey, who became Secretary of State for Energy and Climate Change in February 2012 (and who was still in this post at the time of the interviews), was a prominent supporter.<sup>62</sup> An interviewee noted the importance of his enthusiasm in the department:

“One of the advantages we’ve got is that our Secretary of State [Ed Davey] *is* really into social science...he had the [MINDSPACE] poster up on his wall when he first started – when he first came into Secretary of State here. And so we’ve been doing a

<sup>60</sup> A social researcher in DECC (2).

<sup>61</sup> BBC News, 2010a.

<sup>62</sup> Murray, 2013.

number of behavioural trials which he's really interested in – we're doing one in collaboration with John Lewis... Ed Davey was there on the first day of the John Lewis trial, kind of launching it. He's very keen, he wants updates all the time on how we're getting on. So that helps as well because it also raises the profile of that work. And adds to its value, because if the Minister thinks it is valuable then it is valuable. So that's all quite helpful. It's kind of – it doesn't make any of it easy but it does help when there's that high level of support.”<sup>63</sup>

The ministerial backing brought greater attention and credence to the work of social researchers, and fed demand for behavioural trials across DECC. Thus, while there may have been a symbolic component to the minister's interest in behavioural research, it provided a more fruitful context in which instrumental uses of research could be pursued.

It is also intriguing to note that despite working on similar questions as DEFRA's sustainable consumption and production team a few years earlier, DECC's social research tradition developed with a larger emphasis on behavioural trials than DEFRA's.<sup>64</sup> This highlights how political, institutional, and epistemic influences can combine to shape the meanings and roles of social research in ways that reflect circumstances at the time.

In combination then, the HPE and HCI's managerial approach, along with their efforts to secure recognition for their expertise, and in the context of new government-wide support for behavioural research (with randomised controlled trials (RCTs) viewed as a 'gold standard'),<sup>65</sup> DECC's PET and CIT designed research projects that secured interest from policy officials, with minimal tensions over the quality of their research.

Thus, within a predominantly quantitative epistemic environment, and despite some officials' initial qualms over the robustness of customer insight,

<sup>63</sup> A social researcher in DECC (4).

<sup>64</sup> E.g. DECC & Energy Saving Trust, 2011; DECC, 2014a.

<sup>65</sup> Cartwright, 2007.

the HPE and HCI grew their teams rapidly in just a couple of years to meet unanticipated levels of demand for their services. Interviewees in both the CIT and PET revealed that, on the whole, their work was valued by their colleagues, and there was comparatively little resistance of the sort faced by some embedded analysts in DEFRA. But while there were few epistemic challenges,<sup>66</sup> the building of the CIT in particular faced some institutional barriers before it could grow. These are briefly considered next.

### 3.2 Limits to Growth of Capacity in the Customer Insight Team

So far we have seen that after some initial teething problems, strong interest and appreciation for a particular form of social research expertise emerged across DECC – especially in the teams working on energy efficiency and energy demand policies. Following from the department’s response to the *Capability Review*, the HCI was tasked with building the CIT almost immediately, and therefore began to grow her team before the HPE (whose PET consisted of two researchers until 2012). In doing so, she confronted institutional and epistemic barriers that limited the team’s ability to grow in the first couple of years. These were barriers in institutional procedures, gaps in knowledge, and a perception amongst some policy staff that the team lacked relevance for their specific remit. They are discussed below in turn.

It is not surprising that when the HCI and HPE first joined DECC they found that they would need to put in place certain institutional arrangements before they could achieve the social research capacity they would value. But doing so took time and inhibited their progress during an intense period

<sup>66</sup> This is not to say that social researchers never experienced methodological challenges – Chapter 7 reveals some clear examples of this.

when the rest of the department was already proceeding at a fast pace to deliver policies in the Coalition Agreement. One such set of arrangements was a contracting framework, which lists a set of external research bodies that are pre-authorised to carry out projects for government. The social scientists could at first use other government contracts, such as that of the Central Office of Information, but creating their own enabled them to more conveniently commission projects from recognised social research expert bodies – especially those who produce qualitative studies, which were not well represented on existing contracts.

A second set of institutional arrangements relates to recruitment. In recognition that the organisation was under-resourced since its formation, DECC's spending limits were not reduced as significantly as those of other departments in the 2010 spending review.<sup>67</sup> Moreover, the reductions that were imposed were achieved through a decrease in the size of the budgets of arms-length bodies, thereby protecting the core department's staff and resources, and indeed allowing the core to grow to fill gaps in capacity as identified in the *Capability Review* and elsewhere. Nonetheless, the spending review did bring a government-wide freeze on all external recruitment,<sup>68</sup> which restricted the HCI such that she could only recruit from within the civil service. This by itself was not an issue – the HCI did not initially intend to recruit externally. As discussed above, as part of a commitment to what she perceived to be robust methods, she initially sought to fill research posts with GSR-accredited researchers.<sup>69</sup> However, at this time DECC could not match what other departments offered analysts in similar posts. Other

<sup>67</sup> According to a social researcher in DECC (4).

<sup>68</sup> BBC News, 2010c.

<sup>69</sup> Government Office of Science, 2012, Annex A, p.96.

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departments had a ‘pay allowance agreement’ in place to ensure that analysts’ salaries would be matched for the same post across government departments, and while DECC had these established with other government analytical service bodies, this was not yet created for government social researchers. This restricted their ability to attract staff that satisfied the HCI’s standards,<sup>70</sup> and it would take time before an agreement with the Government Social Research Service was obtained – this was eventually done in 2012.

Given the difficulties of recruiting social researchers from within government, DECC’s social scientists convinced senior civil servants to allow an external recruitment campaign to take place from 2011.<sup>71</sup> Consequently, the CIT began to expand with a mix of accredited government social researchers and social researchers from industry whose qualifications and experience satisfied the HCI, and would be encouraged to later attain GSR accreditation.

To achieve a social research capacity that satisfied the HCI and HPE’s standards then, and which they believed could produce credible research, these two analysts had to introduce institutional changes in the department. By the time of interviewing, the CIT was predominantly formed of accredited social researchers as those without accreditation either acquired it, or had moved on and were in time replaced by researchers who were accredited.

Recruiting from the government social research community was important for affirming the CIT’s social science credentials, but using the competency-based approach advocated by the GSR also contributed to the second barrier the team faced, regarding a lack of topic-specific knowledge. As we saw in

<sup>70</sup> Government Office of Science, 2012, Annex A, p.96.

<sup>71</sup> DECC’s HPE.

the introduction to this thesis, government analysts typically move posts every two years in order to progress in their career. Under this system, it arguably makes little sense for analysts to be assessed on their topic-specific knowledge as part of a recruitment exercise, so the GSR competency framework,<sup>72</sup> which is used for recruitment guidance, focuses on methodological competencies and transferable skills. This may make for a more versatile workforce, but it also means that researchers lack *topic-specific* knowledge that might be helpful if the analysts are then to constructively contribute within a policy framing, or to provide evidence-based challenge to their colleagues. The HCI explained how this initially posed an issue:

“I was thinking ‘oh, why aren’t they raising these things in meetings? These things are really obvious. And then I thought – the reason they are really obvious to me is that I’ve spent five years talking to people about them! And my team haven’t! And then I set about trying to close some of that gap so that my team had a bit more of the knowledge that I had.”<sup>73</sup>

As such, the limits of researchers’ own perceptions of the meaning of social research was, for a brief period of time, seen as a barrier to the growth of social research capacity in DECC. This quote also emphasises the significance of the HCI’s background in private social research companies as this experience enabled her to build in-depth knowledge about environmental and energy issues from a variety of social science perspectives (including, for instance, the literatures on behaviour change, citizens’ engagement with science and technology, and trends in public attitudes towards particular issues) which she could then translate into her work and the department. It would be rare for a social researcher from within government to achieve the

<sup>72</sup> E.g. Government Social Research Service, 2010.

<sup>73</sup> DECC’s Head of Customer Insight.

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same level of in-depth knowledge given the tendency to rotate roles in the civil service. While the HCI was able to address the knowledge gap issue for DECC’s social researchers, it highlights a tension in the arrangement for government analysts, and a gap in the structures of social science advice in terms of familiarity and expertise in specific topics.

Another limitation that the CIT had to overcome in its expansion was arguably a result of its own early success. By late 2011 there was a prevalent perception that the team could do more to explore the social science dimensions of policy areas which were less overtly concerned with consumer behaviours, as is clear in the below extract from a Government Office of Science review:

The aim of the CI team is to help policy colleagues understand their ‘customers’, who include individuals, households and organisations, covering their beliefs, experiences and circumstances. So far there have been ‘easy wins’ for CI in that there is recognition that policies rely on customer behaviour. Other parts of the department may be harder to persuade. When the next round of policy ideas comes through, Customer Insight will get more involved in policy formulation from the outset.<sup>74</sup>

The predominance of behavioural research, in circumstances where researchers could not grow their capacity as quickly as they liked, had the effect of limiting their researchers’ potential to work with officials who did not see consumer behaviours as relevant for their work, such as in the former BERR teams. This point is articulated below by the Office of Renewable Energy Development (ORED):

ORED has not used the social sciences / customer insight very much: they are more focused on individuals and households and we focus more on commercial awareness at a company or industry level. We have talked to the Customer Insight

<sup>74</sup> Government Office of Science, 2012, Annex A, p 70.

Team but they have not yet had the resources to help us yet. We used to sponsor work on on-shore acceptability but not the behavioural analysis.<sup>75</sup>

The BERR teams were also situated in a different part of the department than the CIT, which was situated in the Energy Efficiency Deployment Office division. This reinforces the point made in the previous chapter and in Walker's analysis of social science research officers: the location of researchers within an institution has a powerful epistemic influence over the sort of work that is produced.

As the CIT overcame initial recruitment difficulties and built further capacity, it did develop projects with the energy generation and supply policy teams from what was formerly BERR. But as one respondent noted in spring 2014, there remained a sense that the CIT served those policy teams which had a clearer sense of a 'customer' who needed to be brought on board (i.e. policy areas associated with energy efficiency and energy demand),

"I think we are making too little use of them. I think those parts of DECC that are very much about changing behaviours of the public and are seeking the individuals of the public - those are having far more engagement with our CI unit, for example, than we do. So our energy efficiency/home improvements/climate change -type people have far more engagement than what I would call the bit of DECC that is 'generation-led'. The big kit."<sup>76</sup>

The same respondent added:

"So I think we need to build that capability but I think the value in a resource-constrained world is for our Customer Insight Team, for example, to prove to us that they can enrich our policy-making process rather than being seen as a burden."<sup>77</sup>

<sup>75</sup> Government Office of Science, 2012, Annex A, p.31.

<sup>76</sup> A policy official in an energy generation team in DECC.

<sup>77</sup> A policy official in an energy generation team in DECC.



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Here it was emphasised that social research could be seen as a ‘burden’ in terms of creating extra work for busy officials, because while energy generation and supply teams had a firm obligation to engage with the legal team and with economists who carry out impact assessments, there is no such procedural obligation to engage social researchers.

The latter point regarding officials’ lacking an institutional requirement to seek out social researchers was used in interviews as an example of the epistemic hierarchy operating within DECC.<sup>78</sup> Despite clear growth in recent years, DECC’s social researchers reported at the time that interviews were conducted (2013-2014) that they were at (or near) the bottom of this hierarchy, and this made it more difficult for their case for more capacity to gain influence. Similarly with the epistemic hierarchy described by DEFRA’s social researchers, the epistemic hierarchy in DECC was variously described by DECC’s specialists in terms of size of budget, number of researchers, seniority of staff and how officials framed problems in the first place. Economists were described at the top of this hierarchy – followed by engineers, scientists, statisticians, with social researchers and operational researchers at the bottom.

Aware of these epistemic issues, during these years the HCI, HPE, and Head of Science sought to prove the salience of social research for policy areas across the department’s broad remit – and not just limited to behavioural insights or policy evaluation. As one of the researchers recalled, there were hitherto limited internal resources or opportunity to do so within the CIT and PET:

<sup>78</sup> A DECC social researcher (4).

“So when we started it was just us and we gradually grew our respective teams and we knew we couldn’t – we didn’t have enough capacity to do all the outward looking stuff we wanted to do. We were just so busy trying to run to stand still.”<sup>79</sup>

The lack of engagement with external researchers was noticed particularly by research consultants who had previously worked on climate change policies in DEFRA, two of whom reported that DECC was a colder and less open institution than DEFRA was.

From 2011, the HCI, HPE, and Head of Science collaborated on a variety of activities to strengthen DECC’s social research capacity by eliciting external support. Four examples of this are identified in the next section, two of which are concerned with supporting work within the ‘consumer behaviour’ framing of social research, while the other two were intended to broaden the repertoire of social research expertise that was available to DECC. Together, they helped to build social research capacity by expanding how social research was conceived in DECC, what roles it was deemed to be appropriate for, and how useful it is perceived to be.

#### **4. 2010-2014: External Support for DECC’s Social Research Community**

To supplement social research resources within DECC, and in the light of growing internal demand, the HPE, HCI, and Head of Science explored ways of working with external actors to develop DECC’s social research capacity, particularly with regards to instrumentally contributing towards policy

<sup>79</sup> DECC’s HPE.

development. Aside from hiring staff on temporary contracts,<sup>80</sup> four options were pursued:

- Seconding an academic social scientist into DECC
- Working with the Cabinet Office’s Behavioural Insights Team
- Establishing a Social Science Expert Panel
- Placing a GSR member in the Science and Innovation Group

As we will see, the first two of these helped to develop the behavioural strand of social research, by creating new roles and an appreciation for it, while the latter two did more to expand the meanings associated with social research in DECC. Let us briefly consider each in turn.

#### 4.1 A Seconded Social Scientist

Prior to the recruitment of the two social scientists, the Head of Science agreed with the Economic and Social Research Council (ESRC) to arrange for a research fellow to be seconded into the department. Before starting the year-long post in February 2010, the research fellow expected to work on set projects, but instead he found that he was only person in the department with a remit to work on social science issues. As such, he was asked to engage civil servants across the department. Referring to the job description he was given by the Head of Science, he explained in an interview that his purpose was to “challenge and be challenged” – a phrase which resonates with DEFRA’s first Chief Scientist’s commitment to providing challenge, with whom DECC’s Head of Science previously worked.

<sup>80</sup> Government Office of Science, 2012, Annex A, p.103.

The research fellow spent the start of his fellowship familiarising himself with DEFRA's social science projects, and engaged with civil servants in an informal way. He worked particularly closely with the Head of Science, who was sceptical about social practice theory at first, but gradually warmed to the idea – and even began encouraging colleagues to read a key text for social practice theory, *Converging Conventions of Comfort, Cleanliness and Convenience*.<sup>81</sup>

Then, when the HCI joined DECC, the HCI and research fellow decided to work together to develop a social science toolkit for policy-makers to use. After consulting with academic researchers, they decided to do this by summarising a range of existing social science frameworks that policy-makers could use, to aid civil servants in “thinking through the policy challenge that you are trying to address, and the sorts of things that might work”.<sup>82</sup> The purpose of this was framed in terms of disseminating the Cabinet Office's MINDSPACE approach to understanding and influencing behaviours, as DECC's officials felt a strong pressure to be seen as engaging with the Cabinet Office's recent report.<sup>83</sup> Aware of the unpalatability of social practices research amongst DEFRA officials (discussed in the next chapter), the resulting literature review, published in December 2011,<sup>84</sup> could be seen as a means of exposing civil servants to the perspective in a de-politicised way, via a Trojan horse. It is also noteworthy that the report did not feature the sociotechnical transitions literature, since it was felt that policy officials and scientists were already engaged with this – although I found no mention of it from social researchers.

<sup>81</sup> Shove, 2003.

<sup>82</sup> DECC's HCI.

<sup>83</sup> Dolan et al., 2010.

<sup>84</sup> DECC, 2011a.

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The literature review was used as the foundation for workshops to train civil servants in applying different models of energy use. They were designed to help policy-makers and analysts to look beyond behavioural psychology or economic approaches, and to explore social practice theory approaches amongst others. These workshops had significant reach across the department, and enabled policy-makers to engage with the different models directly:

“So in the training we run we do some kind of hands-on work where we get people, where we kind of present them with a behaviour change problem, but we get them to think it through using MINDSPACE [Dolan et al., 2010] and then we get them to think it through using practice theory, and see if they come out with different ideas. And very often they do. And it is quite helpful because it shows that using two approaches is often good because it helps you to generate more ideas, and different ideas, than you’d have had if you only looked at it through one lens.”<sup>85</sup>

The events thereby helped to enhance the appreciation of the value of different types of thinking about people and energy use. But they were found to be constrained, for three specific reasons. First, as we will examine in more depth in Chapter 7, at this point in time many key decisions about the leading energy efficiency and energy demand policies (such as the Green Deal, smart meters) had already been made and committed to:

“In practice the opportunities to use that kind of behavioural model right at the start of a policy thinking when the territory is really open are really few and far between – because that’s not how [the policy process works]... in theory the policy process should go, ‘right, we need to, in this instance, reduce carbon emissions by X amount, how should we do it? Ah, well in that case, let’s think about...’ You know, you can see that kind of structured approach. We have done that back in our past and we do it around the *Carbon Plans*. But actually mostly, that’s not how policy is born. Mostly, most of what we’re doing now is what was in the *Coalition Plan for*

<sup>85</sup> DECC’s HCI.

*Government.* And then you've got to work out – where there are choices to be made – where can we apply what we know to that.”<sup>86</sup>

Thus, the opportunity for this sort of social research expertise to contribute in a meaningful sense to key policy teams in DECC had been diminished because they had already progressed to a later stage of the policy process. It was simply the wrong time for this sort of research to be valued.

Second, the seconded research fellow recalled that economists who attended the workshop remained unconvinced by the idea. He described a conversation he had with an economist following a recent workshop, whose words were paraphrased as “it’s quite interesting but I just don’t see the need for any of this. I mean, what’s wrong with maximised utility functions?”. Some economists thus remained sceptical of the value of this form of social research.

Third, those who attended the workshops were typically relatively low in the organisation. And so even if they valued the approach, they lacked the influence to reframe energy demand reduction policies to focus instead on the reconfiguration of routines and practices, in the way suggested by social practice theory:

“You know, to what extent, even with a grade 7 [a ‘middle manager’],<sup>87</sup> do they have to actually deploy any of these things in practice? Because there are so many institutional constraints that prevent them from being able to use them. Unless, the point is, that the solution is so effective, that doing all of the additional work is worthwhile. So you’ve got to convince a lot of additional people first. And to convince a lot of people probably means getting a lot of resource on-board to actually make the argument that you can have those people spend their time on this policy rather than that – so you know, those are the kinds of trade-offs you face. So the point is yes, it’s really useful to see [the December 2011 literature review], and I think that’s probably the foundation of the training, but the training can only take

<sup>86</sup> DECC’s HCI.

<sup>87</sup> See Chapter 1, Section 4 on grades in the civil service.

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you so far. And then institutional frameworks can rule against the deployment of it.”<sup>88</sup>

The secondment thus supported the social scientists in expanding how social research was understood in the department, but at this time there was little opportunity for a new policy to be developed from a social practices perspective, or for existing policies to be fundamentally altered.

### 4.2 Working with the Cabinet Office's Behavioural Insights Team

Another option for bringing in social research was to work with the Cabinet Office's then newly formed Behavioural Insights Team (BIT), established by David Cameron in July 2010.<sup>89</sup> The BIT, also known as the ‘Nudge Unit’,<sup>90</sup> was a well-funded body of researchers – drawing particularly on the behavioural sciences (psychology, economics, and social psychology), as popularised in the 2008 book, *Nudge*.<sup>91</sup> Indeed one of the book's authors, Richard Thaler, was prominent in the unit's creation.

The BIT were eager to work with DECC to explore ways of reducing the public's energy use. For DECC's HCI this was an opportunity to bring additional social research resource and credibility into the department fast. DECC's growing CIT and the BIT worked together on a variety of studies over the next few years. Their first study together was intended to support the Green Deal team by investigating whether offering homeowners a loft

<sup>88</sup> DECC's Head of Social Science Engagement.

<sup>89</sup> BBC News, 2010a.

<sup>90</sup> BBC News, 2010a.

<sup>91</sup> Thaler and Sunstein, 2008.

clearance service alongside a loft insulation service would help to increase the uptake of the loft insulation service.<sup>92</sup>

In order to make the most of their collaboration, DECC's researchers initially had to challenge their behavioural research colleagues' preference for RCTs above all other methods. As one social researcher who worked with the BIT recalled, there are advantages and disadvantages to different social science methods, and while RCTs might be afforded a gold standard status by some analysts, they have limitations when applied to the policy construction process:

"Simply knowing whether your hypothesis is true or not is certainly very useful but if you don't know why, or *how* or any of those other things, then replicating those results and particularly scaling up those results is probably going to be very difficult to achieve."<sup>93</sup>

DECC's social scientists were thus more inclined to decide what social research methods would be appropriate for a given problem on a case-by-case basis. To this end, they argued that along with quantitative data collection, qualitative methods should be used to glean an insight into how the interventions were having an impact. Qualitative methods were not used in the loft insulation service trial discussed above – in which too few people signed up for any loft insulation service, rendering the trial inconclusive. But qualitative methods were used in a subsequent trial which was run with John Lewis, exploring whether energy use labels that include information on the lifetime energy use of a white good would be effective in promoting more energy efficient products.<sup>94</sup>

<sup>92</sup> DECC, 2013b.

<sup>93</sup> A DECC social researcher (4).

<sup>94</sup> DECC, 2014a.



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Working with the BIT was therefore not straightforward. Indeed the success of their collaboration cannot straightforwardly be explained, as Peter John has argued, in terms of the BIT’s willingness to engage in flexible and ‘non-hierarchical’ collaborations.<sup>95</sup> Rather, in this case, we see that the collaboration only became effective when the BIT stopped imposing an epistemic preference. Indeed the tensions that arose due to this in the initial stages resulted in what one analyst described as a relationship with “us managing them”.<sup>96</sup>

Nonetheless, the collaborations did get DECC’s social researchers working on RCTs for the first time, and this has since become a staple component of the work of social researchers in DECC.<sup>97</sup> Working with the BIT did therefore help to make social research more visible in the department – particularly after it was endorsed by the Secretary of State, as discussed in Subsection 3.1.

While respondents pointed out that the BIT have matured in their approach to collaborations with government departments, it is striking that no formal relationship was established between the BIT and the Government Social Research Service before the former was privatised. This raises questions about the degree to which the Government Social Research Service was recognised as an expert institution during the Coalition Government years.

### 4.3 Establishing a Social Science Expert Panel

In a move to expand the possibilities for social research input in DECC’s remit, the HPE approached DEFRA’s social researchers to explore the

<sup>95</sup> John, 2014, p.258.

<sup>96</sup> A social researcher in DECC (5).

<sup>97</sup> E.g. DECC, 2014a; 2014b.

feasibility of setting up a joint DEFRA-DECC Social Science Expert Panel (SSEP). In a context of limited resources, the social researchers from the two departments saw benefits in sharing resources to capitalise on the ‘natural synergies’ shared between the two departments.<sup>98</sup> The funding for this was won in 2011. The group had multiple purposes, including to support the departments in developing their internal capacity for using social science, advising them on how they collect and make use of evidence and advice, reviewing research designs and reports, keeping the officials in touch with relevant research in the UK and elsewhere, and contributing input into specific projects or conducting reviews on an ad-hoc basis.<sup>99</sup>

The panel was established in 2012 with twelve academic social science experts, drawing on a diverse body of expertise. This provided an opportunity to expand further how social science’s contribution was understood in the two departments. As a social researcher described below, the panel was valued for its advice - and challenge – with respect to the use of evidence in the two departments. This involved meetings every three months, as well as producing peer review reports, the occasional literature review and, importantly, more ad-hoc conversations with policy officials as deemed necessary:

“The first is we have set piece meetings – two or three a year, and we come and discuss things that are mutually of interest. So we’ve discussed the DECC Evidence Strategy, the DEFRA Evidence Strategy, our model for evaluation, various things like that. Which is good, it’s useful, it’s really engaging, interesting conversations we have. But almost more importantly, each of them are on our framework of call-off contracts. So we can – individual policy teams within each department – can go to them for two or three days’ work. So say ‘what do we know about X?’ and they will come and – they will put together a paper and come back and deliver it for us. Or, ‘we’re not quite sure about this piece of work, can you peer review it for us?’ –

<sup>98</sup> DEFRA, n.d.(a).

<sup>99</sup> DEFRA, n.d.(a).

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they’ll go away and do it. So that kind of really responsive... Or come and talk to our policy colleagues about a certain issue because they’ll really like to kind of *discuss* it. Because it’s so much more useful discussing something rather than reading – especially an academic paper. And so that’s been a really useful model.”<sup>100</sup>

The SSEP, then, was seemingly valued by social researchers and policy-makers as a novel way of bringing social science expertise into the departments, particularly in areas where the social dimension had been little considered. For instance, it provided resources for social researchers to discuss Nimbyism with colleagues in the Electricity, Markets, and Infrastructures side of the department (see Subsection 4.4 below). It thus informed and legitimised social researchers’ policy discussions with colleagues. In this way, it could be drawn upon to help expand the possible meanings associated with social research in both departments. The panel also provided a symbolic function as, in one researcher’s terms, a ‘boundary object’ which “plants a large flag in peoples’ minds”,<sup>101</sup> highlighting that the department values and engages with social science. In these ways, it was seen by interviewees as an important intellectual resource for the department’s capacity to provide social research and associated challenge to policy teams as well as a symbolic achievement for the recognition of roles for social science in energy, food, and environment policy.

#### 4.4 The Head of Social Science Engagement

In addition to the above efforts to expand the applications of social research in DECC, the social scientists arranged with the Head of Science to place a GSR-accredited social researcher within the Science and Innovation Group’s

<sup>100</sup> DECC’s HPE.

<sup>101</sup> A DECC social researcher (5).

Evidence team. Here, the researcher would work with DECC's sympathetic Head of Science, in the office of the Chief Scientist. The position would be called 'Head of Social Science Engagement', and would be a more externally-facing role to engage academic researchers in an attempt to widen the types of social science evidence that would be considered and applied in the department's work. The post was filled by a GSR accredited government social researcher in October 2011.

Placing the social researcher in the Science and Innovation Group was significant. It afforded a perception of distance from the other social researchers in the Customer Insight Team or Policy Evaluation Team who, as we have seen, were narrowly associated with either consumer demand issues or policy evaluation – both of which seemed alien to the minds of those in the energy infrastructure teams of the department. The move had its drawbacks though, in that there were clear tensions as the actors tried to make sense of what he was to do:

"It was a bit of a coup-de-grâce in the sense that there's a team under the [Chief Scientific Advisor] – so neither the [Head of Customer Insight] nor the [Head of Policy Evaluation/GSR] were in teams under [the Chief Scientific Advisor]... so I had no line management links to either of them [the social researchers]. So I was kind of put, in some senses, the worst possible situation. Which is to work to a team who doesn't know what you are doing, and have no formal line management links to people who want you to do things... So the line management links to people who should have a sense of what I should do did not know what I should do, and the people who had no real line management control over me, you know, were the ones that wanted me to do things. Yeah, it was not ideal – it has to be said. But they know that, and of course I knew that."<sup>102</sup>

The Head of Social Science Engagement saw his role as doubly innovative – first in the sense of changing, through challenge, the sorts of questions asked

<sup>102</sup> DECC's Head of Social Science Engagement.

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by DECC’s policy-makers. This would enable the social sciences to contribute more to the policy development process. The second sense in which he saw the role as innovative was in regard to his relationship with external researchers – he would challenge them to think about addressing DECC’s social research requirements:

“There was a sentiment – just from the fact that they had a post with that name – that this was a distinctive type of role from your kind of standard cookie-cutter in a government department whose job is to work with the policy team, to commission social research projects to address specific policy issues – be that either for policy development purposes or for policy evaluation purposes. You know, so the usual thing is that sort of framework. And this was actually much more of a strategic role, influencing internally the sort of questions that are asked. So that the questions that are asked involve the ability – or enable the ability – for social sciences to feed in. As well as then saying well, are you creating a demand, if you like, for social science? And then to look outwards to actually try and meet that demand, you know, by bringing in people who are already working in that area or to influence people who are working on other topics in climate change so that can be brought to bear on energy and climate change in some way.”<sup>103</sup>

In this way, the social researcher played a similar function to the rural researcher on DEFRA’s Science Advisory Council in 2004, as we saw in the previous chapter. There, the rural researcher sought to simultaneously convince the animal health sub-committee to consider the contribution of social science, and at the same time convince academic social scientists to conduct policy-relevant research on this topic. Yet, as a civil servant placed in the Science and Innovation Group with a remit to engage policy-makers directly from across DECC’s policy portfolio, DECC’s Head of Social Science Engagement had greater scope for instilling an appreciation of the potential value of social science insights amongst civil servants, by challenging

<sup>103</sup> DECC’s Head of Social Science Engagement.

embedded assumptions and drawing on the latest research from academic researchers he encountered.

The analyst focused his efforts on engaging officials in the Energy, Markets, and Infrastructure Directorate where it was yet to be shown how social research could support policy teams in policy construction. In doing so, he found it especially useful to draw on the Social Science Expert Panel. For instance, he invoked Patrick Devine-Wright's work<sup>104</sup> in a conversation with the Head of the Infrastructure Planning Team, who wanted to address the Minister's concern over how to tackle 'Nimbyism':

"So I thought ahh, well that's interesting because of course we had Patrick Devine-Wright who is the man on Nimbyism in the energy field, who had written a book and done lots of research to show that Nimbyism isn't really what you think. It's this really interesting conundrum around you know how different groups of people, their expectations and ownership of energy and things like this play out in particular areas. And so not about people disliking [wind turbines] *per se* but the way in which the [wind turbines] are put up – and who's doing it, and how they do it. So there are simple - potentially really obvious ways of tackling Nimbyism that'll be entirely effective and save people lots of money. So I set out as briefly as I could – because it's quite a complex thing to describe – the nature of that kind of problem and how good social research in that context could actually solve Nimbyism, or at least a good serious chunk of it and then enable planning to look ahead."<sup>105</sup>

It is unclear to what extent this particular conversation was followed up by the Infrastructure Planning Team.<sup>106</sup> Nonetheless, it is clear that such conversations did begin to happen, and enabled staff to engage with social research insights which could inform a more reflexive approach to current and future policy-making processes.

<sup>104</sup> E.g. Devine-Wright, 2011.

<sup>105</sup> DECC's Head of Social Science Engagement.

<sup>106</sup> Possible 'impact' in terms of Ed Davey's decision to increase the money a community receives for hosting windfarms, and a possible reduction in energy bills. This was introduced at same time as greater powers were granted to local groups to reject wind turbines, – see Channel 4 News, 2013.

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With his free reining post in a high-status cross-cutting team, the social researcher was able to explore opportunities to increase the capacity and demand for social research across the department. Perhaps his most significant contribution in this post was to work on the department’s *Evidence Investment Strategy*, published in 2014.<sup>107</sup> Many of the social researchers interviewed deemed this document to be particularly significant, highlighting a broad array of areas where social researchers can collaborate with technical experts and policy-makers in order to contribute to the department’s work. It was thought to symbolise a large step forward in expanding how social research was understood within the department – moving away from just focusing on policy evaluation and behaviour change.

To see this it is striking to compare this document against the 2012 *Science and Innovation Strategy*,<sup>108</sup> to gain an insight into the extent of the change in conceptualising the meanings, roles, and value of social research over this time period – at least within the team of scientists. The 2014 *Evidence Investment Strategy* presented a broader conception of social research’s role, highlighting the need to develop research on how investment decisions are made with respect to energy generation and distribution, how policy areas interact, and how positive community engagement could be achieved.<sup>109</sup> By contrast, the 2012 *Science and Innovation Strategy*<sup>110</sup> presented a much narrower sense of the contribution of social research. At that time, the CIT’s role was described in relatively narrow terms – supporting DECC’s ‘customer facing’ policies, supporting energy efficiency work and building customer insight capacity across the department.

<sup>107</sup> DECC, 2014c.

<sup>108</sup> DECC, 2012b.

<sup>109</sup> DECC, 2014c, p.14.

<sup>110</sup> DECC, 2012b.

In the 2014 document then, we see signs of expansion in the interpretations of what social research is and what social researchers' roles in the department are. In particular, it points to ways in which social research can contribute constructively to the supply side of the department, through providing a deeper understanding of how investment decisions might be influenced and insights into how the sociotechnical systems of energy supply and energy efficiency operate.

Reflecting on his experiences, the Head of Social Science Engagement reported that, much like the CIT and PET analysts, he did not encounter prejudice from colleagues towards the social sciences *per se*. Consistent with the CIT and PET researchers, he claimed that DECC's policy staff did not pose barriers to social research:

"The kind of evidence that they want is evidence about how the world works. That's as much as I could say – they don't really care – or differentiate very often – about whether it's engineering evidence, whether it's social research evidence, whether it's economics evidence. You know, some of them will be sceptical if it's social science, because some of them maybe are sceptical of social science – not many, one or two. But generally if it looks credible then they'll go, 'OK, that's useful stuff', they'll take that on board. So pretty much policy officials don't really care, as long as it's good – credible to them, or it ticks boxes, in so far as it looks like the right kind of stuff. So to help them you need to persuade somebody else."<sup>111</sup>

Rather than finding a stigma associated with social research (as some analysts reported in DEFRA) it seems that in DECC's case the major barrier remained in conceptualising what social researchers could do to help the energy markets and infrastructure side of the department – a question which was slowly beginning to be answered.

<sup>111</sup> DECC's Head of Social Science Engagement.



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However, this researcher did experience some opposition in the form of naivety, stemming from a lack of prior engagement with social research. He reported that this was especially the case with the then Chief Scientist, who led his team:

“You know, some technical scientists can be – you know they’re nice people, really smart people, but just don’t know what a social scientist does. And/or think they know what they do and that they can do it – which is the other annoying thing. So, yes senior staff essentially talking for you, or talking over you, because they think they know social science, is probably the single hardest thing to manage...So you kinda have to read between the lines a little bit and look at how they are acting, and whether they are taking on board anything you are saying as an indication of whether or not they value your contribution.”<sup>112</sup>

In this way, senior individuals in the department were able to – perhaps unwittingly – limit opportunities for social researchers to challenge preconceived assumptions. In this researcher’s experience, academic scientists and engineers were more likely to need convincing of the value of social researchers’ contributions than policy officials were. This is perhaps an indication of how far recognition for social research expertise had already come in DECC prior to this official’s arrival.

The Head of Social Science Engagement post was abolished in late 2014 when the researcher left the position. The former Head of Social Science Engagement reflects ambivalently on his efforts. He notes that nobody replaced him in that post, which implies that his tenure of it was probably seen as unsuccessful. But this fact could also be seen as indicative of its success in fulfilling a specific function, of raising the profile of social research expertise across DECC, as was required at that particular time. It is in any case clear that during his time he did stimulate conversations which could,

<sup>112</sup> DECC’s Head of Social Science Engagement.

subsequently, enable a more reflexive approach to DECC's remit. And if these insights are taken further in DECC's successor, the Department for Business, Energy and Industrial Strategy (DBEIS), then significant progress can be made towards using social science as a *basis* from which to develop policies – which was described by the former Head of Science as 'a work-in-progress' in the epigraph for this chapter.

## 5. Recent Developments

The period between mid-2014 and spring 2016 saw some big changes in DECC's social research capacity. The first Head of Customer Insight left DECC in spring 2014, and was replaced by a government social researcher within the team. This HCI and the Head of Policy Evaluation (HPE) split the role of Head of Profession for Government Social Research until the latter left in spring 2016. Over this time, the social research community continued to engage across both sides of the divide in the department – not only on policy development and evaluation projects related to energy demand and energy efficiency (as we will see in the next chapter), but also in the side concerned with the 'big kit'. This includes completing an evaluation of the electricity market reform under the Coalition Government<sup>113</sup> – which was described in an interview as an innovative project for social research in terms of the scale and wide-ranging nature of the policy project under evaluation.<sup>114</sup> They also worked closely with the Office for Nuclear Development in the commissioning and subsequent evaluation of public dialogues and stakeholder workshops on the siting of geological disposal facilities for

<sup>113</sup> Grant Thornton, 2015.

<sup>114</sup> A DECCC social researcher (6).

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nuclear waste.<sup>115</sup> Social researchers’ engagement was described to be highly regarded and influential – in terms of shaping not only a white paper on the topic, but also for potentially setting a precedent in the department for using such approaches again.<sup>116</sup> As such, nuclear energy officials’ instrumental rationales to deliver the minister’s commitments have resulted in early engagement with social research with the opportunity for citizens to have a greater say in decisions.

The social research community’s capacity to work in even the most technical areas of department’s remit was reportedly aided further in the department’s final year by a succession of restructuring moves. Directorates were reorganised to enable better integration of the energy demand and energy efficiency teams with the energy supply, infrastructure, and markets teams. The steps are particularly notable between around heat policy and energy efficiency in the final organisational chart (April 2016)<sup>117</sup> before DECC was dissolved so that DBEIS could be formed.

Perhaps more significantly for the work of DECC’s social research community in general, the PET and CIT were merged in July 2015.<sup>118</sup> They were situated together along with economists and other analysts under the Corporate Services Division. At first glance, this move had two benefits: first, it enabled social researchers from the CIT and PET to provide better support for each other. As a result, they were better placed, as a community, to flexibly manage the department’s social research portfolio as a whole – such that staff can be spread across evaluation and customer insight projects as required. Second, the move enabled social researchers to collaborate more

<sup>115</sup> Icarus, 2015.

<sup>116</sup> Sciencewise, 2016.

<sup>117</sup> DECC, 2016.

<sup>118</sup> A point confirmed by two separate researchers in DECC.

closely with other analysts in the department – including economists who, as we saw in Subsection 3.2, policy officials felt a stronger obligation to work with due to their need to conduct economic impact assessments. If this arrangement has been continued in DBEIS then it may provide greater scope for closer interdisciplinary working between analysts.

Yet, this restructuring also has the corollary of taking social researchers away from their policy colleagues. As we saw when this happened with DEFRA's community of sustainable consumption and production researchers in 2010 (Chapter 4, Section 4), this runs the risk that they may find it harder to maintain the rapport that they previously enjoyed, and consequently struggle to provide a challenge function to policy teams. This risk is further confounded by additional changes. As we saw in Section 2 of this chapter, the core department did not have its budget reduced in the spending review of 2010, enabling the social research community to grow to meet (and shape) the demands of policy teams over the next few years. In the spending review of November 2015 however, DECC's 'day-to-day' budget was reduced by 22%,<sup>119</sup> placing pressure on staff to justify each post and project. In this context, the new structure would make it harder for the social research community to expand its reach and influence, and not aid the creation of posts for social researchers within the senior civil service. As such, there is an additional risk that the subject knowledge expertise that the social research community has accumulated over the years may be lost in the changes between staff - which in turn may weaken their ability to provide challenge.

<sup>119</sup> HM Government, 2015b.

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In addition to this, we may point to two further threats to the sustainability of DECC’s social research capacity: the fact that the former Head of Social Science Engagement was not replaced, and the dissolving of DEFRA-DECC Social Science Expert Panel in 2016. As we have seen in the previous section, these were both important in supporting the internal social research community to provide a challenge function, in part by providing new interpretations of the meanings and value of social research in the subject knowledge they translated to officials. However, while the expert panel was dissolved, the reported reason for this is that the social researchers decided that they could better proceed with separate social science advisory bodies to reflect their distinct approaches, interests, and remits. This external engagement is therefore expected to continue, and while the Head of Social Science Engagement was not replaced, there is an open question as to whether this role is still necessary in a department where social research input is more valued, in an instrumental sense, across the department than it was when the department first opened.

Clearly then, despite some institutional and financial pressures, DECC’s social research capacity was in a relatively strong position when the department closed in July 2016. And while social researchers still occupied less senior posts, were fewer in number, and held smaller budgets than other analysts in DECC, it is striking that since the first couple of years the legitimacy of their expertise has not been threatened. Indeed in contrast to DEFRA’s social researchers (Chapter 4, Section 5) no researchers in DECC claimed that their colleagues failed to appreciate the value of their contribution, nor that research was being commissioned or designed without their input.

In this sense, we can understand the optimism expressed by one social researcher before the 2015 reductions in the department's spending limits were announced:

"I think in DECC unless something goes horribly wrong – from an evaluation perspective, which again, is kind of my thing, we could kind of crash and burn if some of our big set-piece things don't actually deliver anything useful, but I think we've designed them in such a way that they will. And it very much is built into the policy development and delivery project and programme management – it's built into that. So I think, touch wood, it should go from strength to strength actually. Because I think we're delivering something genuinely useful as opposed to telling people you have to do this and they don't actually see the value – I think we genuinely see the value of it... possibly."<sup>120</sup>

The next few years may well see social researchers build on this progress by contributing earlier in policy design and development processes across the new department's wide remit, and working more with teams concerned with energy supply and infrastructure issues.

## **6. Concluding the DECC Story**

In summary, it is clear that after a tumultuous start where senior staffs' preconceptions and institutional barriers conspired to prevent the initial growth of social research capacity, social research came to be appreciated and resourced across DECC.

Much like in the previous chapter on DEFRA, the growth in social research capacity within DECC is more complicated than we might have assumed. It was not the case that policy officials simply took note of research conducted in academia or elsewhere and recruited social researchers to translate findings or to commission related projects for their own purposes – far from

<sup>120</sup> DECC's HPE.

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it. Instead we see that internal demand for social research was stimulated after years of effort from internal and external social scientists to create internal capacity for what they saw as relevant social science expertise for the department, as well as to spur external interest and research agendas that could support the department. In this department, which initially framed its remit in narrowly economic and engineering terms, it was only after internal capacity was established that many policy officials started to see how social research could be relevant for their remit, and thus began to appreciate the value of commissioning social research.

Gradually, the social research community grew in resource, size, and reach. Starting from a clean slate and with external support, the analysts overcame structural adversity to develop a distinctly DECC-flavoured social research tradition. In an epistemic context that favoured economic and engineering perspectives over others, and against a backdrop of growing prominence in behavioural trials across government, DECC’s social research community earned a reputation for understanding peoples’ behaviours, and were particularly associated with the use of behavioural trials. But the HCI and HPE then used their roles to reframe understandings of social research, for example by developing a Social Science Expert Panel and embedding a social researcher amongst the scientists. Notably, it is chiefly amongst other analysts, not generalists, that social researchers claimed to have encountered contestation over their expertise in recent times – in contrast to DEFRA which, as we saw in the previous chapter, had some policy teams which remained suspicious of social researchers.

Last, on the evidence presented so far of the inner workings in DEFRA and DECC, these departments do not resemble the depictions of UK policy institutions in technical policy domains as narrowly technocratic and

scientific.<sup>121</sup> In both, challenge from social science was, on the whole, acknowledged as an important contribution of internal and external social scientists. But what we have yet to establish is to what extent, and how, social researchers have actually influenced policy-making processes. The next two chapters address this problem by focusing on policy areas in which social researchers have been particularly active. These chapters will expose a great variety of social researchers' influence under different conditions.

<sup>121</sup> Wynne, 1993; Chilvers and Macnaghten, 2011, p.539; Pallett and Chilvers, 2013.





## Chapter 6

# Influencing Behaviours in DEFRA? Social Researchers and Sustainable Consumption

“Start where the people are at”

- A phrase that was used particularly by social researchers in the SCP area to emphasise the importance of using social research insights early in the policy process.

### 1. Introduction

HAVING CONSIDERED efforts to expand capacity at the department-wide level, this chapter and the next focus on how social researchers' influence has been socially negotiated within specific policy areas in DEFRA and DECC. While capacity has clearly grown, what forms of influence have social researchers exercised, and under what conditions?

This chapter addresses these questions by studying the case of social researchers' engagement with DEFRA's work on sustainable consumption and production (SCP), which hosted DEFRA's work on pro-environmental behaviour change for approximately a decade. The next chapter considers social researchers' influence in DECC's work on energy efficiency and demand reduction. Both policy domains have a significant component

associated with influencing how citizens live their everyday lives, and comparisons between the departments will be drawn in the final chapter.

The introduction to this thesis highlighted that the Government Social Research Unit identifies ‘behaviour change’ as an area of expertise held by social researchers, although its interpretation within distinct departments is open-ended and likely to vary over time. Government can attempt to change what citizens do in various ways: by providing financial incentives and information provision, by making alterations in the context in which choices are made, and/or by disrupting particular patterns of practice and reinforcing others. Each of these approaches affords claims to expertise from actors from a wide range of disciplines: economists, behavioural economists, behavioural psychologists, communications experts, marketing experts, social scientists, geographers, and others. Within government departments economists, statisticians, communication staff, social researchers, and even generalists may claim epistemic authority over how best to change citizens’ behaviour. A key concern in this chapter, then, is to understand and contextualise the influence that social researchers achieved while working in SCP policy. As we will see, DEFRA’s work on promoting environmentally friendly behaviours did not begin with the arrival of social researchers but it came to be increasingly shaped by them. Moreover the idea of social research came to be associated with the idea of behaviour change – not only in DEFRA but, as we will see in the next chapter, also in DECC.

This chapter therefore provides an answer to research question three:

*Research Question 3: How have social researchers influenced work on specific policy areas in DEFRA?*

To address this question, the chapter begins by setting out changes in the political, institutional, and epistemic context which preceded the arrival of the first social researcher in the SCP team. Section 3 then investigates how social researchers' behaviour change work gradually gained significance since 2006, highlighting increasingly reflexive ways in which social research insights were applied within SCP policy development and implementation. Section 4 reflects on the subsequent expansion and then decline of social researchers' (and colleagues') work on sustainable consumption between 2009 and 2015, and Section 5 links the discussion back to the research questions – suggesting that we should rethink reflexivity in the light of the data presented in this chapter.

The next chapter will address the same research question with respect to social researchers' engagement with social researchers' involvement in key energy efficiency and demand reduction policy areas in DECC.

## **2. 2001-06: After Are You Doing Your Bit?**

The aim of this section is to outline the context in which a 'window of opportunity' emerged,<sup>1</sup> in which social research expertise came to be increasingly influential within the SCP, between 2001 and 2006.

Since the 1980s, successive UK Governments have sought to encourage citizens to act in more environmentally friendly ways – using, amongst other tools, national communications campaigns.<sup>2</sup> Prior to DEFRA's formation

<sup>1</sup> Kingdon, 1995.

<sup>2</sup> Another important mechanism for this is the Environmental Action Fund, which provided support to community groups and organisations to deliver sustainable development projects at a local or regional level. The fund began in 1992 in DETR, and continued in DEFRA until 2008 (Brook Lyndhurst, 2009).

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these campaigns were managed by the Department of the Environment (subsequently Department of the Environment, Transport and the Regions) and the Department of Energy.<sup>3</sup> Campaigns included, under the Conservative Government, *Helping the Earth Begins at Home* (1991- c.1996), and *Going for Green* (1995-1998), and under the Labour Government, *Are You Doing Your Bit?* (1998-2001).<sup>4</sup>

At the time of DEFRA's creation, *Are You Doing Your Bit?* was a live campaign. It was, at first, deemed internally to be well-grounded in research insights. At an Environmental Futures Forum session on 'Domestic Best Practices Addressing Climate Change' at the G8 Summit in February 2000, the campaign's coordinator in the Department of the Environment, Transport and the Regions presented the campaign as an example of UK Government best practice, using qualitative research to “help shape its direction” (by focusing on specific, positive messages about what people could do) and quantitative research to monitor its success.<sup>5</sup> Yet, over the next year, policy officials would question whether *Are You Doing Your Bit?* really was an example of 'best practice'. A qualitative study commissioned in late 2000 - at the peak of the campaign – found that it had achieved a great level of awareness using national media campaigns and a roadshow which toured the country promoting sustainable action within local communities.<sup>6</sup> But the study also found that the campaign had little impact beyond raising awareness. As one former DEFRA generalist (with expertise in marketing

<sup>3</sup> Until 1992 when most of the Department of Energy's portfolio was moved back into the Department of Trade and Industry, excluding the Energy Efficiency Office which found its way into the Department of the Environment (Barr, 2008, pp.88-89), and eventually into DEFRA, and then DECC.

<sup>4</sup> Barr, 2008, p.90.

<sup>5</sup> Environment Agency (Japan), 2000.

<sup>6</sup> House of Commons Environment Food and Rural Affairs Select Committee, 2001.

and communications) recalled, in terms of actions adopted by members of the public, the project had “achieved sweet f\*\*\* all”.<sup>7</sup>

Aware that *Are You Doing Your Bit?* had achieved little by means of motivating action, and in the midst of crisis surrounding DEFRA’s portfolio when the department was established, £5 million of the campaign’s 2001 budget was diverted towards managing the FMD crisis.<sup>8</sup> As a result, the campaign team dropped media advertising and the remaining budget was spent on maintaining the travelling roadshow.

It was not long, however, before the idea of promoting sustainable living to citizens was revived. Following the World Summit on Sustainable Development in Johannesburg in August/September 2002, sustainable consumption and production emerged as a policy priority for DEFRA.<sup>9</sup> There, the Secretary of State for Environment, Food and Rural Affairs, Margaret Beckett, committed to ambitious targets to make consumption and production more sustainable. There was now a renewed focus on promoting sustainable action across society, with a drive to ensure that any new initiatives move beyond awareness-raising and achieve substantive change.

In this context where improved outcomes were desired, and despite an absence of social researchers within DEFRA at the time, social research projects were commissioned by different policy teams between 2003 and 2005 to aid policy-makers to think through how best to make consumption and production more sustainable in the UK. As we will see, this provided an

<sup>7</sup> A former DEFRA civil servant with prior experience in marketing, based in the Communications Directorate; self-styled ‘behaviour change expert’ – a title reflected on his DEFRA business cards.

<sup>8</sup> House of Commons Environment Food and Rural Affairs Select Committee, 2001.

<sup>9</sup> DEFRA, 2003b, p.18.

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opportunity for qualitative research to contribute at an early stage in identifying options within SCP policy.

One of the first qualitative research outputs was a report commissioned by the Sustainable Development Commission (SDC), a quango which worked closely with DEFRA’s SCP policy team. The SDC asked its economics commissioner, Tim Jackson from Surrey University, and Laurie Michaelis from Oxford University, to review the academic literature on sustainable consumption. Their report challenged government and stakeholders to reconceive the role of government in shaping consumption patterns, arguing that ‘conventional approaches’ (such as education and information provision, regulation and fiscal interventions) are neither effective tools nor the limits of the resources available to government for influencing individual behaviour.<sup>10</sup> To this end, the researchers emphasised the importance of understanding how consumption behaviours get ‘locked-in’, the significance of exemplifying good practice where it has occurred already, and the value of working with, influencing, and learning from a broad community of actors.

This analysis was intended to feed into DEFRA’s and the Department of Trade and Industry’s joint SCP framework. Both the research project and framework were published in September 2003.<sup>11</sup> The framework does not draw heavily on the insights from Jackson and Michaelis’s report, instead framing the main drivers for achieving sustainable consumption in the relatively narrow terms of information, prices, regulation, or barriers to competition.<sup>12</sup> However, the framework report did show some signs of

<sup>10</sup> Jackson and Michaelis, 2003, pp.57-65.

<sup>11</sup> HM Government, 2005.

<sup>12</sup> DEFRA, 2003b, pp.22-25.

conceptual use of research,<sup>13</sup> in emphasising that academic research on sustainable consumption is ‘highly complicated’ and heavily contested, but is nonetheless worthy of policy-makers’ attention because “policy interventions will not be fully effective unless the drivers for consumer behaviour are better understood and taken into account.”<sup>14</sup> It was hoped that by grappling with this research better, the team could improve on *Are You Doing Your Bit?* in terms of influencing citizens’ behaviours.

The following month a similar analysis on sustainable consumption was commissioned – this time by DEFRA’s Communications Directorate.<sup>15</sup> The research project was tendered via the Central Office of Information (COI), and was won by a research consultancy with experience in marketing, led by Andrew Darnton. Two studies were produced, which focused on communicating sustainable development to the public. This research is particularly notable for (i) emphasising that qualitative research (which is argued to be most appropriate for understanding public levels of understanding) shows that very few people can explain the concept of sustainable development, with many ‘going blank’ or fishing for clues when asked<sup>16</sup> and ii) for proposing that DEFRA should consider adopting a market segmentation approach to public campaigns, noting that segmenting the public and tailoring messages for specific audiences is typically not done by those seeking to promote sustainable development.<sup>17</sup> Darnton’s analysis also reinforced Jackson and Michaelis’s suggestion that government should

<sup>13</sup> Nutley et al., 2007, p.36.

<sup>14</sup> DEFRA, 2003b, p.16.

<sup>15</sup> Darnton, 2004a, p.3.

<sup>16</sup> Darnton, 2004a, p.6.

<sup>17</sup> Darnton, 2004b, p.26.



support community groups and non-governmental organisations that can drive collective action.<sup>18</sup>

DEFRA thus began to engage with qualitative research on sustainable consumption in 2003 and 2004 – with some signs of conceptual learning taking place at this time. As we saw in Chapter 4, in January 2005 the Central Analytical Directorate hired its first Government Social Research (GSR) accredited government social researcher. This analyst had a cross-cutting role across the department’s remit, but also helped the sustainable development strategy team to translate academic insights into ideas in their forthcoming sustainable development strategy document, *Securing the Future* – published in March 2005.<sup>19</sup>

A close reading shows that by the time this strategy document was produced, DEFRA’s approach to behaviour change had undergone a marked shift since the 2003 SCP framework. Now, under the heading of ‘helping people make better choices’,<sup>20</sup> there was a wider discussion of the range of tools at government’s disposal, including attention paid to communities and interaction, as well as a recognition that government has a role to play in leading, managing and exemplifying change. This was summarised in the 4Es model (see Figure 3 on the next page), which was designed as a tool for policy-makers to use when considering how to achieve policy goals which hinge upon a change in the public’s behaviours.<sup>21</sup>

<sup>18</sup> Darnton, 2004b, p.14.

<sup>19</sup> HM Government, 2005.

<sup>20</sup> HM Government, 2005, p.24.

<sup>21</sup> HM Government, 2005, p.26.

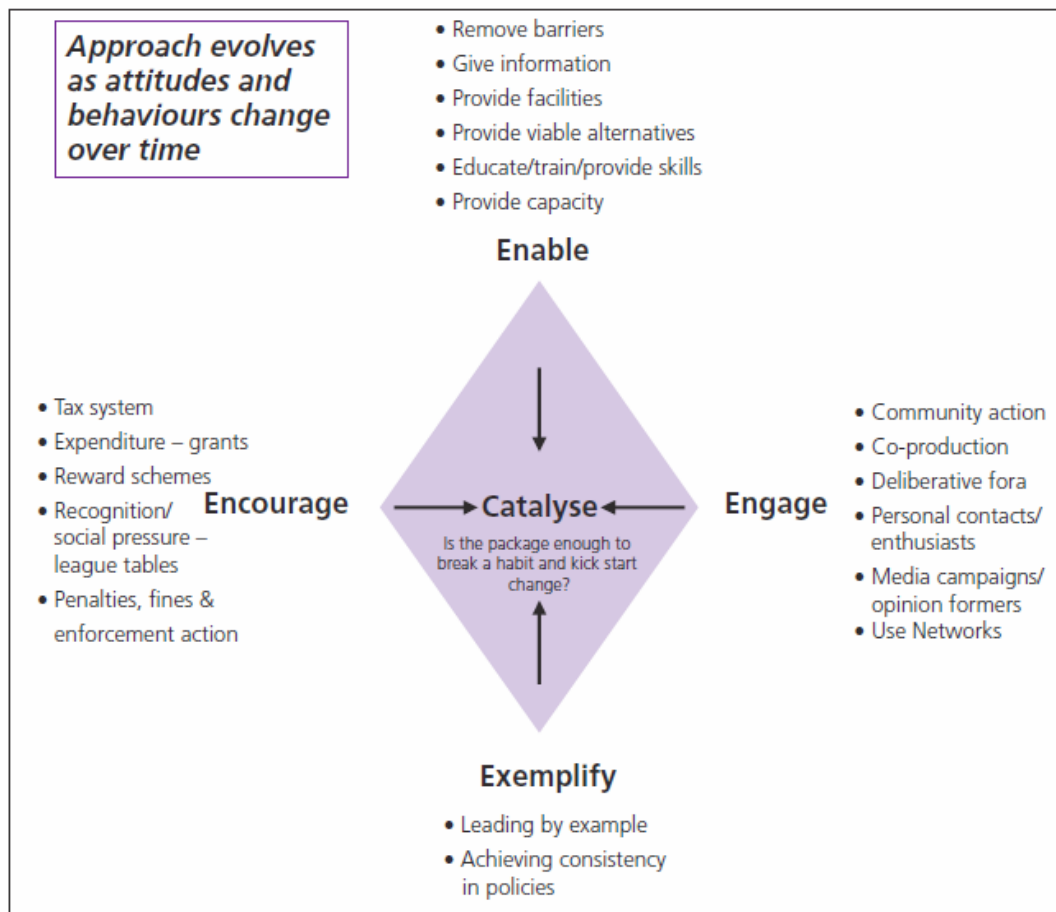


Figure 3: 'The 4Es Model' (HM Government, 2005, p.26)

Informed by the previously discussed literature reviews, this model encourages policy-makers to consider a broad repertoire of instruments for catalysing pro-environmental behaviour change, including government's capacity to work with community groups and social networks, to encourage skills development, and to reflect on institutional relationships (including those involving government itself) – all with a view of achieving a considerable degree of change in citizens' actions. It is clear, then, that the strategy was *shaped*, in rather 'direct'<sup>22</sup> ways, by the sorts of qualitative

<sup>22</sup> Owens, 2015, p.127.

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analyses considered thus far – although, as we will see, Darnton’s advice to develop a public segmentation model was not heeded until a later time.

The influence of social science at this time must be understood within a broader and changing epistemic context within DEFRA and also more widely across the civil service. We saw in Chapter 4 that from 2003 onwards DEFRA’s Science Directorate and the Science Advisory Council highlighted the value that social research can bring across the department – for instance “to improve our understanding of the economic and social drivers of change in resource use and assess different ways of influencing behaviour”.<sup>23</sup> Alongside this, there was a broader shift towards appreciating behavioural research in government, fuelled by a report produced David Halpern and colleagues for the Prime Minister’s Strategy Unit. This was published in February 2004, and helped to further attract interest in behaviour change expertise across Whitehall – reframing how civil servants conceived what they did. This report represented all government activity as an effort to produce, in one way or another, behaviour change in society.<sup>24</sup> As this quotation from a former senior official in DEFRA suggests, this perspective began to percolate into senior officials’ conversations in DEFRA:

“Certainly in DEFRA it came to a point when we recognised that we couldn’t just invent new policies and put them out and just *expect* them to be implemented and followed. At that time, there was quite a lot of fundamental thinking being done asking the basic question ‘what are we really trying to do?’. So, what do we do? When you think about what government departments actually do, they prohibit certain things; and then they subsidise certain things; they also give out advice. There are other things they do but basically that is it. Prohibitions are criminal/legal sanctions, so there’ll be a law saying you can’t do this or that – so if you take fishing policy for example, there’d be a law saying that you can’t catch certain species of fish at certain times of the year – and if you do, you would be fined or go to prison.

<sup>23</sup> DEFRA, 2003a, p.12.

<sup>24</sup> Halpern et al., 2004.

And then there are the support schemes – for example, under the common agricultural policy – the Government will give you, depending on the crop, a certain amount of money per hectare for growing that crop. And then there's advice – and there is a huge number of advisory notes that government departments produce each year. But then various people started asking the basic question 'well actually what is this all for?'. And then the penny dropped and somebody said, "well it's all about effecting *behaviour change*". And that was the first time it was said explicitly: "we're in the business of behaviour change". "Well, do we have anybody in the department who understands how to effect behaviour change?" "Nope!" "Well we'd better get some people in!" And that's when DEFRA started getting social scientists involved."<sup>25</sup>

Within this epistemic context, and a time of strong political commitment and a desire to move beyond the failings of previous information campaign, *Securing the Future* resonated with the changing epistemic context in DEFRA by endorsing the view that policy-makers must better understand how to change behaviour – and indeed by going further than the other reports to claim that it should be treated as a "core policy skill".<sup>26</sup> Where previously it was taken for granted that economists and communications managers possessed the relevant expertise for developing communications campaigns, the new behaviour change paradigm<sup>27</sup> made it possible for others' claims to expertise to be considered legitimate.

Shortly after *Securing the Future* was published, DEFRA's waste policy team published a report which was intended to set out a direction for the team's work on behaviour change. This project was commissioned from a social marketing research consultancy.<sup>28</sup> Consistent with Darnton's previous review for the Communications Directorate, the authors advocated a segmentation-based approach to better target public communications on waste issues. The research consultants later collaborated with Andrew Darnton to develop a

<sup>25</sup> A former scientist in DEFRA (3).

<sup>26</sup> HM Government, 2005, p.27.

<sup>27</sup> In the sense of an epistemic worldview – Kuhn, 1970.

<sup>28</sup> The Social Marketing Practice, 2005.

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prototype segmentation model – without funding – confidently anticipating the direction they believed that DEFRA was moving towards. Given the failure of previous campaigns and the social marketing evidence that was mounting within and around DEFRA, it seemed obvious to these consultants that a segmentation model would come next. Looking back at how DEFRA used this work in later years (as we will see in Section 3), these researchers conclude that their instinct was vindicated:

“And I know that when they started to look at this and the earlier workers picked up our work on this they said ‘this is great, thank you, this is exactly what we needed to start feeding into our own segmentation model’, which they then developed.”<sup>29</sup>

This section has therefore shown that within and around DEFRA, actors gradually warmed to the idea that social marketing expertise in segmentation models on the one hand, and academic social scientists’ deeper appreciation of the symbolic status that consumption holds in society on the other, would aid the department to go beyond the shortcomings of *Are You Doing Your Bit?*. Dormant seeds<sup>30</sup> were being planted which would, in time, reshape how the SCP team would seek to engage citizens. In late 2005, the policy team found a marketing and communications expert to help them implement these ideas in practice, and also decided to temporarily embed a seconded academic social scientist within their policy team. The social researcher was to be a research manager, who would help the team to build the evidence base for interventions on sustainable consumption. Experience with academic research on sustainable consumption was deemed necessary for this role.

<sup>29</sup> A research consultant (1).

<sup>30</sup> Owens, 2015, p.132.

The next section focuses on the work of the SCP team between 2006 and 2009, highlighting how social researchers worked with colleagues to negotiate the influence of social research within that policy area.

### **3. 2006-2009: Twelve Behaviours for Seven Publics**

The SCP team's social research post was filled in early 2006, just before David Miliband became the Secretary of State leading DEFRA. Although the previous section highlighted that social research was already having some influence on the work of the SCP team, we will see that the team's new researcher enabled the influence of social research to be elevated to a new level. There are two key reasons for this. One is that the first analyst's addition to the team marks a shift towards commissioning empirical research projects as opposed to reviews of existing literature. The second is that being placed *within* the team enabled social researchers to work closely with the generalists, and to challenge assumptions they held about citizens' engagement with environmental issues. Before we consider social researchers' contribution however, we must explore the work that the SCP team was already developing at this time. The first subsection addresses this by outlining how it was decided *what* behaviours the Government should promote to the public. The second subsection discusses how the analyst was able to negotiate their influence within the team. The third subsection then considers how the researcher's projects were translated into policy development during that time. This will reveal that through a gradual process of contestation and collaboration, social research expertise came to be increasingly influential within SCP policy, such that behaviour change came to be seen as synonymous with social research expertise – affording social

researchers a greater role to play not only in evidence gathering, but also in the early stages of policy development.

### 3.1 Selecting Behaviours

When David Miliband replaced Margaret Beckett as Secretary of State in May 2006,<sup>31</sup> he placed tackling climate change at the top of DEFRA’s priorities, and called for ‘one planet living’.<sup>32</sup> This was significant not only because it reinforced the standing of work on sustainable consumption within the department, but also because it clarified DEFRA’s stance on conflicting issues within the department’s remit. In a political context where DEFRA had very recently disappointed many farmers in its implementation of the European Union’s single payment scheme,<sup>33</sup> there were emerging tensions between DEFRA’s commitment to supporting the agriculture industry on the one hand and its ambitions to reducing the environmental impacts of consumption and production in the UK. A lack of clarity over how the department should proceed became a hurdle for the SCP team’s initial work such that a planned citizens’ forum on food behaviours was aborted during Beckett’s leadership, as a research consultant remembers:

“The food project that never went anywhere was launched when she [Margaret Beckett] was Secretary of State...One of the reasons that that project never got off the ground was because of the conflicts and tensions. And then David Miliband came in and he said ‘right, we’re about climate change. That trumps everything, off you go folks!’ And then that must have resolved some of the tensions – I mean, not got rid of them entirely, but at least gave clear guidance from the top of the shop about what the priorities were.”<sup>34</sup>

<sup>31</sup> BBC News, 2006.

<sup>32</sup> Miliband, 2006a.

<sup>33</sup> Owens, 2015, p.253.

<sup>34</sup> A research consultant (2)

In addition to setting climate change and SCP as top priorities under his leadership, David Miliband saw government's role as "empowering and enabling citizens".<sup>35</sup> This was at a time of reportedly widespread public concern with preventing environmental damage and climate change, according to surveys and focus groups.<sup>36</sup> His stated reason for addressing sustainable consumption was the high environmental impact of consumption, although at the same time the Government also recognised that encouraging greater awareness and participation in reducing greenhouse gas emissions amongst citizens could help to build support for more ambitious policies.<sup>37</sup> In this way, the politician's epistemic worldview was closely aligned with the new epistemic context within DEFRA: both framed the problem in terms of influencing individual citizens' behaviours.

Soon after his appointment, Miliband instructed the SCP team to identify a small number of steps that the Government could recommend people take, via the Directgov website, to reduce the environmental impact of particular behaviours.<sup>38</sup> DEFRA's SCP team then commissioned Green Alliance to host and report on three workshops in Autumn 2006, bringing a broad variety of stakeholder groups together to collectively agree on the priority pro-environmental activities that Government should promote to members of the public so as to achieve 'a step-change' in sustainable action.<sup>39</sup> It was believed that this approach would enable DEFRA to learn from the experiences of environmental organisations, and also achieve some 'buy-in' from those

<sup>35</sup> Green Alliance, 2006, p.6.

<sup>36</sup> Sustainable Consumption Roundtable, 2006, p.10.

<sup>37</sup> HM Government, 2006, p.121.

<sup>38</sup> A former SCP policy official (1).

<sup>39</sup> Green Alliance, 2006.



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groups, who volunteered their time to contribute to the process.<sup>40</sup> As such, the SCP team’s social researcher and social marketing official did not propose projects for this aspect of the team’s work. However the group did single out social marketing expertise as important for subsequently ‘selling’ the actions to citizens, and literature on sustainable consumption was cited to make the point that DEFRA must move beyond information campaigns and tackle the structures that ‘lock-in’ particular behaviours.<sup>41</sup>

The workshop participants eventually agreed upon the shortlist of key behaviours (see Appendix 4, Figure A4-2).<sup>42</sup> After consultation with other policy teams (within DEFRA and also within the Department for Transport), DEFRA’s SCP team settled on twelve key behaviours, spanning across home resource use, transport, and products – as noted in the diagram in Figure 4 on the next pages.

Two observations from this process are worth highlighting here. First, the workshop participants considered the likely public acceptability of particular behaviours as part of their criteria for the shortlist. But with no empirical evidence on UK citizens’ current views on the acceptability of different actions under consideration, the ensuing discussion involved high levels of disagreement and it was agreed that the shortlist might have looked different otherwise.<sup>43</sup> Second, it is clear that the impact of meat consumption remained a difficult issue at this time. Some workshop participants argued that ‘low impact diet’ should be placed higher on the y-axis in recognition of the relatively high carbon emissions associated with eating animal protein. In response it was claimed that the impact was somewhat counterbalanced by

<sup>40</sup> Green Alliance, 2006, p.4.

<sup>41</sup> Green Alliance, 2006, pp.7-8.

<sup>42</sup> Green Alliance, 2006, p.62.

<sup>43</sup> Green Alliance, 2006, p.45.

negative 'knock on effects' that reduced meat consumption would likely have on UK fishing stocks.<sup>44</sup> Besides this, there was also the question of whether it should be removed from the shortlist because of its likely unpopularity with citizens, while others rejected this on the basis that they should not be afraid of making difficult decisions for the environment. The result was thus clearly a negotiated and highly contingent outcome, but nonetheless succeeded in its aims to identify key behaviours and to achieve buy-in for these from environmental groups.

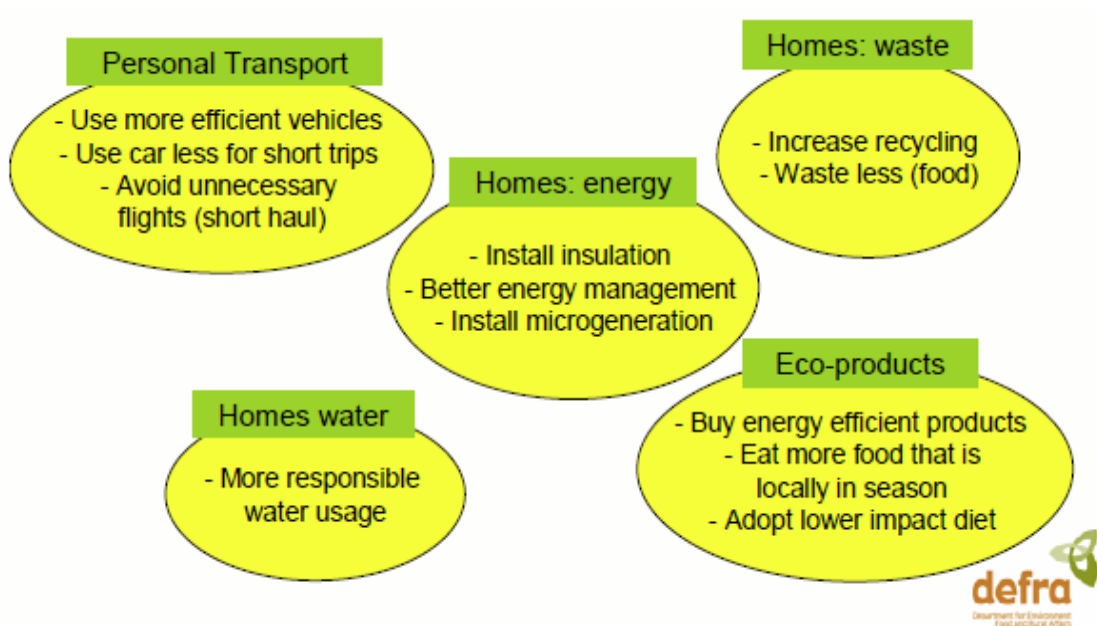


Figure 4: Twelve Target Behaviours (DEFRA, 2008a, p.5)

In retrospect, this process can be considered a missed opportunity for empirical social research to inform the selection of target behaviours. But over the same time period that these workshops were taking place, the SCP team was exploring how best they could promote particular behaviours to

<sup>44</sup> Green Alliance, 2006, p.37.

citizens, and here social research was able to play a more instrumental role. We will consider this next.

### 3.2 From Informing to Understanding...?

While the policy team were eager to learn from academic and social marketing expertise about behaviour change – and despite a growing recognition across DEFRA of social marketing and sustainable consumption researchers’ expertise in understanding behaviour – the new social researcher perceived that the officials held problematic preconceived notions of the public and of what was required in order to engage citizens. Drawing on her expertise as an academic social scientist working on sustainable consumption, the seconded researcher (soon to become a permanent social researcher) recalled that a lot of work went into revealing and challenging the policy officials’ ‘scientific’<sup>45</sup> assumptions about the power of a top-down message to influence citizens’ behaviours:

“I don’t think you should underestimate the size of the step that was being taken. Because at the time it was still a ‘we need a comms campaign that tells people what to do’. And it’ll be a one message, one campaign, way of doing things – and a complete assumption of an information deficit: that if we could just get people to understand what we understand then they will do this other thing...and I would sit there in the meeting and say ‘why? If I told you what I know about whatever it is, would you do something different?’ ... ‘Well no, but that’s because I am like this’. I said ‘OK, so if I told your mum, would she do something different?’ ‘Well no because that’s like...’ ... ‘OK, tell me one person that you can think of that if you persuaded them what you said was right, and all of this evidence you’ve got is right, would they do anything different? One example that they’ll do something different?’ And it’s things like that, to actually be able to clarify what was different about this approach, that really worked. So from there we – well, [my colleague], set forth on a segmentation model – she had a marketing background so she was very focused on how to segment – and a really good understanding of ‘well if we’re going to

<sup>45</sup> Stirling, 2008, p.262.

segment, what are we going to segment, what does that mean? And how are we going to do it?' And again, that was very, very different thinking and moved things forward right across the behaviour work that we were doing."<sup>46</sup>

Confrontations such as these enabled assumptions to be revealed and *challenged* within the department, providing an opportunity for double-loop learning.<sup>47</sup> And, as the social researcher emphasises, the internal challenging of assumptions paved the way for the commissioning of a research programme that would provide an empirical basis for the SCP team's engagement activities. Arguably, the social researcher's intervention here aided the policy officials to shift from seeking to use social science in a symbolic way, to seeing how empirical research could play a more instrumental function.<sup>48</sup>

Consistent with recommendations from the research reviews analysed in Section 2, between 2006 and 2007 the SCP commissioned a pro-environmental behaviours segmentation model that would enable policy-makers to go beyond awareness-raising, and instead understand what drives people towards particular behaviours. The research contractors developed a public attitudes survey to form the basis of the model – and this was carried out in spring 2007.<sup>49</sup> Given the SCP team's concern with behaviours (rather than attitudes or values) it may seem surprising that the survey did not focus on participants' take-up of specific behaviours. But this was because officials recognised that people who adopt one environmentally-friendly behaviour (e.g. recycling regularly) do not necessarily partake in another (e.g. avoiding unnecessary flights). It was therefore decided that the segmentation model

<sup>46</sup> A social researcher in DEFRA (1).

<sup>47</sup> Schön and Rein, 1994.

<sup>48</sup> Boswell, 2009, p.124.

<sup>49</sup> DEFRA, 2006b, p.32.

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should be based on attitudes and beliefs towards the environment in general and towards a range of actions that would be indicative, to a degree, of their potential to take-up the twelve behaviours discussed in the previous section. For example, participants would be asked whether they agree with statements such as “‘the Earth has very limited room and resources’”, and “‘people have a duty to recycle’”.<sup>50</sup> Researchers argued that this would provide more ‘real’ segments – in the sense that they would capture deeper attitudes and ‘worldviews’ which motivate consumption and not be biased by the adoption of particular behaviours – although as a consequence the model would not be especially strong in terms of predictions for any one behaviour in particular.<sup>51</sup> The resulting segmentation model identified seven segments, and can be found in Appendix 4, Figure A4-3.<sup>52</sup>

To an extent, this segmentation model reflects the institutional context in which it was commissioned. By the end of 2006, it was recognised that there were at least four DEFRA teams funding work associated with promoting changes in peoples’ behaviours: the Environment Business and Consumers team (where the social researcher was based, within the SCP team), the Sustainable Development Unit, the Climate and Energy: Households and Markets team, and the Communications Directorate.<sup>53</sup> Ahead of an imminent cross-government comprehensive spending review, a ‘knowledge hub’<sup>54</sup> was established in early 2007, to consolidate knowledge and expertise on behaviour change. This hub was named the ‘Sustainable Behaviours Unit’ (SBU) and was housed within the Sustainable Consumption and Production

<sup>50</sup> Darnton, 2013a, p.8.

<sup>51</sup> Darnton, 2013a, p.8.

<sup>52</sup> Eppel et al., 2013, p.38.

<sup>53</sup> DEFRA, 2006b, p.19.

<sup>54</sup> DEFRA, 2006b, p.41.

team. In addition to the SCP team's social researcher and marketing expert, an additional social researcher was recruited. It is this team who commissioned the segmentation model, with an eye to satisfy the requirements from colleagues across the department. Thus, with a broad scope across policy issues and grounding in 'real' segments (i.e. segments that are based on attitudes and behaviours in general, and less contingent on particular policy initiatives), the segmentation model was a sufficiently flexible tool to enable policy makers to develop ideas starting from their understanding of publics, as well as allow communications specialists to infer what sorts of techniques might work best for different audiences.

To complement the segmentation model, the SBU also commissioned a set of qualitative studies under the theme 'Public Understanding of Sustainable Lifestyles'. The purpose of these research projects would be to glean deeper insights into citizens' diverse views, knowledge and willingness to adopt changes with respect to sustainability in food,<sup>55</sup> banking,<sup>56</sup> energy consumption,<sup>57</sup> and leisure activities<sup>58</sup>. The team's first social researcher recalled commissioning them thus:

"The way that I came to the Public Understanding series – that first series of work that we did on that programme – was basically me saying "well, we need to understand where people are at". Now if we take a social marketing approach – which was the trendy term at the time – a social marketing approach means you start where people are at, you understand the barriers/motivators for their current actions, you understand the barriers/ motivators of what would cause / what would help them to change, or what are the 4Es that would enable them to change."<sup>59</sup>

<sup>55</sup> Owen et al., 2007.

<sup>56</sup> Dawkins et al., 2007.

<sup>57</sup> Brook Lyndhurst, 2007.

<sup>58</sup> Miller et al., 2007.

<sup>59</sup> A social researcher in DEFRA (1).

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As this quote makes clear, although the social researcher was openly critical of policy colleagues’ assumptions, she did not question the social marketing framing. Rather, in her view it was key that she worked closely with the social marketing expert in the SBU to strengthen connections not only between research and communications expertise, but also to collaborate in challenging the generalists in the team:

“It was very important to have comms colleagues working with us – it was very important to have [the social marketing colleague] working with us – she was part-comms, part-research. And so you know, for both her and I it was very much a sort of a bridging role between the research and comms...but also between the research and the policy development – so saying to the policy people ‘are you asking the right question in the first place?’ ‘Are you setting about this in the right way?’”<sup>60</sup>

A former SCP policy official reiterated the importance of the close collaboration between the social researcher, social marketing expert, and policy team:

“Oh it was great! No it worked very well and well I mean I think from my perspective it worked very well because between them and me we were each bringing something different in. And you know, mine might have been the slightly dumbed down, what is it that people might find helpful in looking for, you know, which wouldn’t necessarily pass a strict academic test. But it was prompted by [David Miliband’s] talk of ‘what are the five things people could do?’”<sup>61</sup>

In this collaborative vein, the social researcher specified that the *Public Understanding* set of research projects should purposefully recruit participants to be representative of the seven different segments. This allowed comparisons to be made across the groups, and emphasised that officials should expect to find diverse perspectives amongst different

<sup>60</sup>A social researcher in DEFRA (1).

<sup>61</sup> A former SCP policy official (1).

citizens. Significantly, it enabled them to use the qualitative research to infer how acceptable each of the twelve target behaviours would be to each segment, as shown in Figure A4-4 of Appendix 4. From this, they could develop targeted campaigns and engagement activities that would be tailored to the expected responsiveness of each group, rather than a universal campaign for all audiences.

Furthermore, through the superimposition of the 4Es model on top of the seven segments (as can be seen in Appendix 4, Figure A4-5), the idea that information campaigns alone would not be sufficient to influence peoples' consumption choices was 'inscribed'<sup>62</sup> into the *Framework for Pro-Environmental Behaviours*, published in January 2008. Hence, 'positive greens' were identified as people who could be persuaded to adopt any environmental behaviour, from eating less meat to flying less.<sup>63</sup> For them (as well as for the 'concerned consumers' and 'sideline supporters'), the best strategy was thought to be to enable them (by 'removing barriers') and to engage them through communication campaigns or targeting them through the use of influential leaders. By contrast, for 'waste watchers' and 'cautious participants', researchers advocated a greater emphasis on encouragement (through fiscal incentives) and exemplifying government's commitments to change.

Clearly then, the SCP team had made some conceptual shift from focusing on information campaigns that were imagined as being able to achieve universal appeal across society towards engaging in broader and more salient ways with citizens. Through close collaboration on research projects

<sup>62</sup> For more on the role of inscribed knowledge in policy see Freeman and Sturdy, 2015, p.10 – citing Latour, 1987.

<sup>63</sup> Although in practice neither of these issues were addressed explicitly by government campaigns, because of internal tensions.



such as these, the social researcher was able to constructively influence how SCP policy generalists conceived of the public. Indeed, in a recent review for DEFRA, Andrew Darnton has argued that this reframing of ‘the public’ was the most substantial contribution from the model:

The biggest impact of the P-E Model [pro-environmental behaviours segmentation model] was on policy makers: fundamentally demonstrating that they should be developing policy with multiple publics (not a single public) in mind.<sup>64</sup>

Leaving aside the subtext that implies the model did not achieve policy impact (an issue we will return to in Subsections 3.3 and 3.4 below); it is clear from the quotations that the social researcher was able to develop a degree of ‘double-loop’ learning within the policy team.<sup>65</sup> By confronting colleagues’ ‘information deficit’ assumptions,<sup>66</sup> the social researcher made it possible for social research to be commissioned which would enable the team to explore policy ideas more in-tune with ‘where people are at’. This was achieved through embracing rather than critiquing the given marketing framing as it allowed the social researcher to prove the utility of social research insights within the high-profile team.

By commissioning empirical projects (along with the provision of grants to community action groups via the Environmental Action Fund), and organising workshops and conferences, DEFRA’s SBU nurtured a broad stakeholder network of behaviour change specialists with diverse perspectives and skills – including research consultants, non-government

<sup>64</sup> Darnton, 2013a, p.1.

<sup>65</sup> Schön and Rein, 1994.

<sup>66</sup> It is also interesting to note that DEFRA’s notion of the ‘information deficit’ model has its roots in the deficit model described by STS scholars (with what appears to have been minimal influence from STS), and can be traced in the references back to Alan Irwin and Brian Wynne’s *Misunderstanding Science?* - Irwin and Wynne, 1996.

organisations, companies, action groups, and academic researchers, who all supported DEFRA's SCP to translate research into practice. Interviewees recall a sense of excitement amongst the network throughout what is now considered to have been the 'golden days'<sup>67</sup> of DEFRA's pro-environmental behaviour change work (between 2003 and 2011):

"It was really vibrant, new tenders coming out, there was a kind of buzz – from the whole research community, you know, what's the next route, what's coming up next, what opportunities will be coming – because everyone knew there will be opportunities to bid into, so there was that, and the expectation that there would be research to do."<sup>68</sup>

Hence, although the process in which behaviours were selected could be criticised for failing to utilise empirical social research, there was a clear conceptual shift between 2006 and 2008 in terms of how citizens are understood. A more reflexive framing of publics emerged, which recognised diversity in society, and the need to engage with different citizens differently. The key question now is to ask if and how this deeper understanding translated into more reflexive policy ideas – this is explored in the following two sections.

### 3.3 And Back to Informing Again?

It is tempting to conclude that despite the SBU's best efforts, the most significant impact of their work between 2006 and 2008 was to support a better understanding of how to *inform* the public about sustainable consumption. That view is consistent with a critical reading of the quotation

<sup>67</sup> A research consultant (3).

<sup>68</sup> A research consultant (1).

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in Subsection 3.2 suggesting that the biggest impact of the segmentation model was to change how policy officials viewed citizens. Yet, this and the following subsection show that the research was in fact far-reaching across the SCP remit.

### *Twelve publics as an audience for public communications*

As noted at the start of Section 3, the SCP team initially intended to use research insights to develop advice for the public to find on the Directgov website. Having decided that DEFRA should advocate a reduction in meat consumption, policy officials remained concerned about the citizens’ likely reaction to being told to eat less meat.<sup>69</sup> This concern was substantiated by findings from the *Public Understanding of Food* research project, which found low support for government promotion of meat-free diets amongst most segments (apart from ‘positive greens’):

Meat and dairy feature prominently in participants’ ideal menus, are favoured for their taste and are both foods on which participants are reluctant to compromise. As a result, when reducing consumption of meat and dairy products is discussed explicitly, most participants are resistant to this goal.<sup>70</sup>

The research consultants recommended a more low-key approach:

In terms of direct communication around this goal, there is a delicate balance to strike. Being explicit about what this goal means in practice works for a small minority. Some environmentally committed participants pledge to eat vegetarian once a week after hearing the case made. However, there is also a risk of alienating other audiences, who reject this goal because they feel that it is too interventionist and ‘nanny state’ and counter-cultural.<sup>71</sup>

<sup>69</sup> A research consultant (2).

<sup>70</sup> Owen et al., 2007, p.39.

<sup>71</sup> Owen et al., 2007, p.60.

The researchers argued that instead of explicitly advising citizens to eat less meat, a more salient message would be to promote a balanced healthy diet. This would be associated with reduced environmental impacts because it would provide alternative sources of protein than meat. This recommendation, which is consistent with ideas previously put forward at the Green Alliance workshops discussed in Subsection 3.1,<sup>72</sup> appears to have been taken on-board in the development of content for the Directgov website. As such, the site did not explicitly discuss the impacts of meat production or the importance of reducing its consumption – instead presenting a broad case for a change of diet.<sup>73</sup>

In addition to content for the Directgov website, David Miliband wanted a high-profile public communications campaign on climate change that would both inform and enable citizens to take action.<sup>74</sup> A campaign called ‘Act on CO<sub>2</sub>’ was launched in 2007<sup>75</sup> and was initially jointly funded with the Department for Transport, with DECC agreeing to part-fund the campaign when the department was formed.<sup>76</sup> Act on CO<sub>2</sub> used the pro-environmental behaviours segmentation model to target particular groups with specific messages which, according to the model, would be most salient to them.<sup>77</sup> An example targeting the ‘waste watchers’ segment is provided below.

<sup>72</sup> Green Alliance, 2006, p.37.

<sup>73</sup> Directgov [National Archives], 2009a.

<sup>74</sup> A communications official in DEFRA.

<sup>75</sup> Whitmarsh et al., 2011, p.202.

<sup>76</sup> Directgov [National Archives], 2009b.

<sup>77</sup> Although there remains a divide in the behaviour change community as to whether it is more effective to engage citizens with climate change on terms that would be most salient to them, or to appeal to environmentalist values. The latter may not resonate with many citizens, but the former is likely to reinforce the notion that it is acceptable to take action only insofar as one’s quality of life is not diminished – see Crompton, 2008.



**Figure 5: ‘Save Money Save Fuel’ – An Advertisement Encouraging Citizens to Reduce Their Fuel Consumption (screenshot taken from a television advertisement, accessed from HM Government [National Archives], 2009).**

But the campaign was intended to move beyond the deficit model by using advertisements such as the one above to direct the audience to an online tool, which they could use to measure and take control of their carbon footprint.<sup>78</sup> In this sense, it was considered an enabling device rather than an awareness-raising campaign.

Amid a government-wide ban to all ‘non-essential’ communications budgets,<sup>79</sup> the campaign was interrupted in 2010 after 357 complaints about the frightening nature of the advert and the extent of future environmental disaster attributed to climate change.<sup>80</sup> Then in 2011, the initiative was criticised by the House of Lords for failing to take into account evidence on

<sup>78</sup> A communications official in DEFRA. See also Directgov, [National Archives], 2007.

<sup>79</sup> Sanders, 2013.

<sup>80</sup> BBC News, 2009.

the grounds that the ineffectiveness of information deficit models “is now widely known”<sup>81</sup> – despite the fact that information provision was only planned to be one aspect of the campaign.

### *Twelve publics as research subjects*

Besides communications campaigns, the segmentation model was also used as a recruitment framework for sampling participants for qualitative research projects to understand ‘where the people are at’ on particular issues. It was used, for example, to recruit participants for a very influential research project on the public acceptability of introducing personal carbon allowances – an initiative that David Miliband had publicly endorsed in July 2006 as having potential in the future.<sup>82</sup> The key idea would be that the greenhouse gas emissions associated with everyday fuel consumption (e.g. travel or domestic energy use) would be priced, and individuals would be allocated a limited number of ‘free’ emissions, beyond which they would buy more permits.

The social researchers’ project on public acceptability<sup>83</sup> was one amongst four ‘pre-feasibility’ studies commissioned to explore the potential of a carbon allowance scheme - with others analysing how effective it would be for reducing carbon emissions,<sup>84</sup> the likely distribution of the scheme’s impacts,<sup>85</sup> and its technical and financial feasibility.<sup>86</sup> All reports identified issues for the initiative, but its likely cost and extremely low levels of public acceptability were cited as the reasons why DEFRA terminated work on the

<sup>81</sup> House Of Lords Science and Technology Committee, 2011, p.21.

<sup>82</sup> Miliband, 2006b.

<sup>83</sup> Owen et al., 2008.

<sup>84</sup> DEFRA, 2008b.

<sup>85</sup> Thumim and White, 2008.

<sup>86</sup> Lane et al., 2008.

policy idea. The research contractors exploring its public acceptability found the idea was resisted by all seven segments.<sup>87</sup> One researcher who ran focus groups for the project recalled that “it was officially the least popular thing I have ever talked to anybody about. And that, by the way, includes badger culling!”<sup>88</sup> Some of the focus group respondents likened the idea to wartime rationing or the poll tax.<sup>89</sup>

The policy team concluded that the personal carbon allowance idea was ‘ahead of its time’<sup>90</sup> and therefore they would maintain interest in the scheme but not progress with policy development at that stage. Social researchers cite this as an example where social research was particularly influential in the policy process,<sup>91</sup> achieving visible and short-term influence with their challenging research – although economists reportedly claim full credit for the idea’s abandonment too.

Another application of the research involved the SBU insisting that a survey with 17 ‘golden questions’ should be used by contracted researchers in order to monitor and evaluate community-based environmental behaviour change projects funded by the department (including the action-based research projects, see Subsection 3.4). The golden questions would reportedly enable researchers to determine, with 75% certainty,<sup>92</sup> the proportion of people who participated in a given initiative who fit into the different segments. Some stakeholders, such as the National Union of Students, found this to be a more helpful tool than others did.<sup>93</sup>

<sup>87</sup> Owen et al., 2008, pp.20-41.

<sup>88</sup> A research consultant (2).

<sup>89</sup> Owen et al., 2008, p.22.

<sup>90</sup> DEFRA, 2008c, p.4.

<sup>91</sup> Collier et al., 2010, p. 29.

<sup>92</sup> According to a research consultant (3).

<sup>93</sup> Darnton, 2013a, p.17.

Moreover, policy officials recalled that the social research commissioned by the SCP team often had implications for their work on sustainable production too – for example by highlighting that consumers expected producers to be dissuaded from selling unsustainable products. In this way, social research was a core part of the team's work as a whole.

This is not to say that social research was used at every opportunity. One respondent noted that research on citizens' views could have informed the 2008 Climate Change Act. Nonetheless, it is clear from the examples considered in this subsection that between 2006 and 2008 the research and segmentation model commissioned by the SBU was not only used for top-down communications purposes. Through making their case and challenging their colleagues' assumptions, social researchers and the social marketing officials were able to move beyond an end-of-pipe function, and instead created novel ways for social research to influence the team's work. As such, their work was used at an early stage in policy development to consider the feasibility of a personalised carbon allowance scheme, as well as to monitor and learn from third sector projects the team funded. It was not, however, until 2009 that social researchers would mobilise their insights to develop new (and arguably more reflexive) policy ideas – in the form of action-based research projects (ABRPs).<sup>94</sup> As we will see next, these projects have been particularly resilient amid the department's changing epistemic and political contexts – and remain live at the time of writing (summer 2016).

<sup>94</sup> Grounded in the idea of action research, where researchers participate in the design and development of a project, and their research insights are utilised in the process – for more on this see, for example, PSI & SEED Foundation, 2013, p.16.



### 3.4 Action-Based Research Projects

While social researchers did not choose the marketing framing which the first research projects contributed to, they adopted more of a leadership role in setting the direction from 2009 onwards. The research and pro-environmental behaviours segmentation model had highlighted a great degree of diversity amongst citizens, and argued that different approaches should be taken for influencing different people. In addition, the team’s latest Environmental Action Fund round ended in 2008. Social researchers commissioned an evaluation of the fund, which was produced in January 2009.<sup>95</sup> Among other points of improvement, it was highlighted that many of the projects funded during the three-year scheme could have been more effective if the community groups operated with a better understanding of their target audience – i.e. if they “start from where the people are at”<sup>96</sup> – and if they achieve “buy-in” from influential actors within organisations and community groups.<sup>97</sup> With these points in mind, the social researchers proposed the use of pilot studies to try out novel means of promoting sustainable behaviour:

“So the action-based research projects, they came about as a way of piloting, testing, the framework.... Let’s try it and see what happens.”<sup>98</sup>

The idea was to take theoretical concepts from the vast research on influencing behaviours that they had commissioned before then and test

<sup>95</sup> Brook Lyndhurst, 2009.

<sup>96</sup> Brook Lyndhurst, 2009, p.145.

<sup>97</sup> Brook Lyndhurst, 2009, p.147.

<sup>98</sup> A social researcher in DEFRA (1).

their effectiveness in influencing citizens' behaviours in small-scale sustainability projects.<sup>99</sup> If the pilots were successful, they might then be scaled up for a larger audience. Instead of preparing a strict specification for the projects, the SBU selected thematic concepts to be explored through in-depth analysis of projects in practice.<sup>100</sup>

Examples from the first round of projects are listed in Figure 6 below.

Action-Based Research projects funded by Defra (first round).

Project	Project concept
Food Loop	Testing how co-design can be used in 'closed loop system' to collect food waste, compost (by means of a rocket composter), and use the compost to grow fruit and vegetables in a community
Energy watch	Exploring the 'moment of change' of leaving home for the first time to start at university to use less energy
Plug-It	Working with plumbers as trusted intermediaries to test whether they are effective at giving water saving advice to householders
Digital stories	Exploring the potential of older people as influencers through story-telling to adopt a range of sustainable behaviours
Schools as social networks	Exploring whether children's social networks impact on levels of textile recycling

Figure 6: DEFRA's First Round of Action-Based Research Projects (image from Eppel et al., 2013, p.37)

Each of the projects was intended to test the application of different theoretical concepts in practice. And each would be collaboratively designed and delivered by businesses, non-profit organisations and members of the public, with funding from DEFRA. Importantly, the projects would have to be designed to be sufficiently salient to all stakeholders involved, such that

<sup>99</sup> Eppel et al., 2013, p.36.

<sup>100</sup> A DEFRA social researcher (3).

everyone taking part is motivated to see the success of the project – as opposed to a government-led top-down imposition of sustainable ways of life upon the public. Moreover, to be eligible for funding, the social researchers required applicants to test a concept from the literature, and insisted that the reviewers of the project use the pro-environmental behaviours segmentation model to glean a deeper understanding of the actors involved, with implications for how it might be scaled-up.<sup>101</sup>

Let us examine two of these projects in greater depth – the ‘food loop’ and ‘plug-it’ projects. These two projects were chosen for this analysis as they were explicitly referred to in interviews, and because there is more information available about them in documents than the others.

The ‘food loop’ project sought to test the idea of engaging stakeholders to collectively design a system for a local residential community in council housing to use their food waste to produce compost, which in turn would be used to grow their own food. The initiative was intended to build on insights from previous research funded by DEFRA<sup>102</sup> which posits that composting schemes would be more effective if stakeholders are engaged early in the initiative’s development process – although the research report notes that in practice the residents were only invited in after the local authority and service provider had agreed on key aspects of the design.<sup>103</sup>

The project, which was run in a council estate in Camden in London, was also intended to help address a specific problem in that engagement with recycling and composting initiatives was particularly low amongst lower

<sup>101</sup> A DEFRA social researcher (3).

<sup>102</sup> Slater et al., 2010.

<sup>103</sup> PSI & SEED Foundation, 2013, p.13.

socio-economic groups across the UK.<sup>104</sup> If the UK was to hit its recycling and waste targets then DEFRA and its partners would need to find a better way to engage these actors. Prior research suggested that these groups held somewhat entrenched attitudes opposing the idea of recycling food waste, but that these issues could potentially be overcome if the actors were engaged appropriately.<sup>105</sup> Past attempts by the Waste Resources and Action Programme to increase food composting rates in deprived areas in Hackney and elsewhere achieved low participation rates.<sup>106</sup> Furthermore, the policy team acknowledged that central government is not always trusted as a messenger for communicating about climate change because it is seen by some as having an interest in taking advantage of the environmental issues to raise taxes, while local authorities are sometimes accused of asking communities to take more responsibility without a reduction in council taxes. Drawing also on literature about the potential effectiveness of ‘co-designed’ projects,<sup>107</sup> the researchers believed that a co-designed community-engaged project could offer promise as an alternative, more mutually beneficial approach.

The initiative faced barriers – particularly with the provision of services at appropriate times for the residents – and the local council ceased to fund the project.<sup>108</sup> Yet, DEFRA’s social researchers and policy colleagues saw it as a success because it provided policy actors with insight into how food waste could be reduced in deprived areas, it identified potential barriers in engagement and delivery, and despite the cut in local authority funding the

<sup>104</sup> PSI & SEED Foundation, 2013, p.12.

<sup>105</sup> PSI & SEED Foundation, 2013, p.3.

<sup>106</sup> WRAP, 2009, p.20.

<sup>107</sup> PSI & SEED Foundation, 2013, p.1.

<sup>108</sup> PSI & SEED Foundation, 2013, p.121.

scheme continues to be effectively run and expanded by volunteers at the time of interviews.<sup>109</sup>

The ‘plug-it’, project, by contrast, is described by civil servants as less successful as an initiative – although from a research perspective it provided useful insights.<sup>110</sup> The project was developed to test the idea that plumbers could act as ‘trusted intermediaries’ to discuss water efficiency with their customers. The notion that ‘trusted intermediaries’ could help DEFRA to reach more people than they would otherwise be able to reach was first discussed in *A Framework for Pro-Environmental Behaviours*.<sup>111</sup> As with the Food Loop project discussed above, it was hoped that a design could be developed such that everybody involved would benefit:

The co-design process will ensure that the tools add value for the intermediaries as well as for the consumer. The project will look at the ‘what’s in it for me’ perspective of the professional. For example, the tools should empower a plumber to give better advice moving him/her from just fitting products to providing a design solution for the client, such as providing a pumped mixer shower with an aerated water saving head rather than the ‘power shower’ the customer requested. The cost fitting may be higher but the running costs will be a lot lower and there will be environmental benefits, so the plumber will generate more work, and be viewed as a knowledgeable professional and an environmental champion.<sup>112</sup>

In its application though the research contractors found that the plumbers were not well suited to play the role of a trusted intermediary, because their

<sup>109</sup> Eppel et al., 2013, p.38.

<sup>110</sup> Eppel et al., 2013, p.38.

<sup>111</sup> DEFRA, 2008a, p.23. At this point we might be critical of the use of ‘trusted intermediaries’ to engage different publics and interpret this as a move by DEFRA to avoid the issue of how trusted it is by different groups of people (c.f. Wynne, 2006). But given the evidence that different types of intermediaries (such as retailers and local institutions) have been found to be effective messengers for different segments (DEFRA, 2008a, Annex p.VI), this seems to be a justified and cost-effective means of engaging more widely than might otherwise be feasible for the department.

<sup>112</sup> DEFRA, n.d.(b).

typical work does not afford many opportunities for a salient discussion about water efficiency with their customers. One conclusion drawn from that initiative is that “demand for water efficiency will ultimately be customer driven” – suggesting that more needs to be done to make water efficiency appealing for water users.<sup>113</sup>

These examples show how the ABRPs have achieved some conceptual learning among policy actors, about the diversity of approaches to influencing behaviours at their disposal. From this, new policy ideas could be developed, although in the climate of austerity at the time that interviews took place a social researcher pointed out that the schemes could achieve impact without further government involvement, by inspiring community groups. Social researchers also noted that they were well-regarded by their policy colleagues:

“The thing about our action-based research projects is that the policy people get heavily involved as the findings as they develop and emerge, just sort of shape them in a way that helps them really.”<sup>114</sup>

This claim was reiterated by former SCP policy officials, who reflected positively on the ABRPs:

“So the project itself would deliver some value, but the learning from it would be a more important part of it. So if you like, from a social science point of view, it would provide more value.”<sup>115</sup>

Another generalist added:

<sup>113</sup> Eppel et al., 2013, p.38.

<sup>114</sup> A DEFRA social researcher (3).

<sup>115</sup> A DEFRA SCP policy official (1).

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“So you’re not going to easily change the world with projects of that size. But you could experiment.”<sup>116</sup>

Moreover, policy officials felt that there was an additional benefit to using an ABRP approach to grant funding, in that it enabled the SCP team to have greater control over what type of projects would be funded in contrast to the typical projects previously funded by the department’s Environmental Action Fund (1992-2008)<sup>117</sup> or Greener Living Fund (2008-2011).<sup>118</sup> In addition to requiring the testing of particular concepts and the use of the segmentation model, the policy team also specified rough areas of focus (e.g. fishing, food waste, water use etc.) in accordance with the interests of the policy-makers at the time.<sup>119</sup>

The first-phase projects were initially rated highly within DEFRA particularly because of their innovative nature. Their reputation within DEFRA was soon buoyed further when researchers pointed to their similarity to an idea that David Cameron had pursued when he became Prime Minister in 2010 – the small business research initiative, where a small business could win government contracts to provide policy solutions. By emphasising “parallels”<sup>120</sup> between the ABRPs and the small business research initiative, the former were made salient under the new administration. And as we saw in Chapter 4, they were celebrated in the 2014 Evidence and Innovation Strategy report.<sup>121</sup>

In addition to invoking alignment with the Prime Minister’s small business research initiative, the projects have also most recently been described as

<sup>116</sup> A DEFRA SCP policy official (2).

<sup>117</sup> Lucas et al., 2008.

<sup>118</sup> A DEFRA SCP policy official (1).

<sup>119</sup> A DEFRA social researcher (2).

<sup>120</sup> A DEFRA social researcher (1).

<sup>121</sup> DEFRA, 2014, p.4.

pioneering a ‘co-production’ approach,<sup>122</sup> in the context of the Cabinet Office’s recent plans for open policy making to become ‘the default’,<sup>123</sup> as part of their agenda for civil service reforms.<sup>124</sup> A review of the implications of the government’s plans for open policy making for DEFRA, authored by an external behavioural research consultant who consulted social researchers and other actors within DEFRA and the stakeholder community, identifies DEFRA’s ABRPs as exemplars of the sort of open ‘co-production’ policy making that the Cabinet Office was advocating. In these ways, the social researchers and other supporters of the ABRPs remain relevant and maintain interest within DEFRA – and indeed across Whitehall. The ABRP programme entered its fourth round in May 2014, and seems likely to continue.

The ABRPs have thus been adapted to shifts in the political, organisational, and epistemic context within (and around) DEFRA. This is despite a change of ministerial priorities that has rendered much other sustainable behaviours work (such as the pro-environmental behaviours segmentation model) obsolete, as we will see in the next section.

#### **4. 2009-15: Nine ‘Headline’ Behaviours, Still Seven Publics?**

So far we have considered the ways in which social researchers have achieved some influence in the SCP policy domain and the conditions in which this has been possible, paying particular attention to the role of challenge. Since 2006 social research has been mobilised to gradually change how the team thought about citizens and what could be done to promote

<sup>122</sup> Darnton, 2013b, p.29. In the sense of collaboration rather than in Jasanoff’s sense.

<sup>123</sup> HM Government, 2012, p.14.

<sup>124</sup> Rutter, 2012.



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more sustainable ways of living. This section examines the epistemic, institutional, and political changes which shaped the work of social researchers as they moved from the SCP’s Sustainable Behaviours Unit to a more centralised team, the Centre of Expertise on Influencing Behaviours, in 2009 (which was first introduced in Chapter 4).

Reflecting on the strength of the collaborations between the SCP officials and the team’s social researchers, one of the generalists recalled that the analysts made significant and novel contributions to the work of the team:

“Discussions with social researchers were hugely important in enabling us to think through the benefits of insight and segmentation as a methodology to engage people and take them on a journey towards more sustainable practices. That’s quite different from traditional approaches that for example would mean working with established stakeholders groups such as NGOs or business.”<sup>125</sup>

We also saw in Chapter 4 that by 2009 such research was well-regarded not only in the SCP team but also more broadly across the department. In response to new demand, the SBU was turned into the more cross-cutting Centre of Expertise on Influencing Behaviour (CEIB). We also considered that despite its limitations, interviewees reported that a strength of the CEIB was that it enabled ‘forward thinking’ projects to be developed which might not have been otherwise.

The most significant ‘forward thinking’ project that the CEIB were responsible for was an update to the 2008 framework for pro-environmental behaviours. This was published in 2011 and entitled the ‘Sustainable Lifestyles Framework’.<sup>126</sup> The updated list of behaviours (shown in Figure A4-6, in Appendix 4) reflected new buy-in from policy teams in areas such as

<sup>125</sup> A former SCP policy official (1).

<sup>126</sup> DEFRA, 2011b, p.13.

natural environment and biodiversity – and also formed the basis for further collaborative work to ensue between them. Nine ‘headline’ behaviours were defined, each encompassing a broad range of more specific ‘sub-behaviours’. As before, these were selected through engagement with the wider research and stakeholder community, and the actors did not always agree. A respondent recalled disagreeing with policy officials over the inclusion of installing ground-source heat pumps as the evidence suggested that they have a minimal environmental impact. Yet this action was still included because it was considered an important ‘policy driver’ by officials.<sup>127</sup>

In the development of the 2011 Sustainable Lifestyles Framework,<sup>128</sup> the CEIB also took a symbolic step towards recognising long-standing criticisms of DEFRA’s dominant understanding of how to achieve sustainable consumption. While the publication of the *Framework for Pro-environmental Behaviours* in 2008 invited much praise and recognition for SCP’s social researchers it also attracted some negative attention from some academic social scientists who contested DEFRA’s predominantly individual choice framing of sustainable consumption. These sociologists argued that that approach overlooked the structural elements which influence resource use in society, and lacked a historical appreciation of how lifestyles have changed in the past (and therefore could change in the future).<sup>129</sup>

Between 2008 and 2011, the odd project which utilised a non-individualist perspective did get commissioned (e.g. theoretical reports on practice theory<sup>130</sup> or on the sociotechnical transitions literature,<sup>131</sup> which were briefly

<sup>127</sup> A research consultant (4).

<sup>128</sup> DEFRA, 2011b.

<sup>129</sup> See, for instance, Shove, 2003.

<sup>130</sup> Such as Darnton, 2010. Unpublished but referred to in Shove, 2011.

<sup>131</sup> Such as Geels et al., 2008.

defined in Chapter 1). But external researchers reported that this work did not appear to be applied or discussed in policy reports.<sup>132</sup> And in the case of practice theory in particular, interviewees claimed that during that time social researchers were reluctant to engage with the research – the term ‘practices’ was even described as ‘toxic’ as it symbolised an unwelcome criticism of their contribution to the policy process.<sup>133</sup>

By 2011, after considerable contestation between social researchers and members of the research community who embraced non-individualist approaches,<sup>134</sup> CEIB’s social researchers came to appreciate that these researchers’ criticisms posed a threat to their credibility amongst internal and external actors:

“There were a group of people who I think were very knowledgeable, social researchers in DEFRA and elsewhere, who were very knowledgeable about behavioural theory actually and understood the concepts around Nudge,<sup>135</sup> and felt almost, felt a little bit concerned, possibly, that if you tell everybody that it’s all about Nudge, then you’re sort of putting all of your eggs in one basket. And actually, people will sooner or later realise that Nudge is not everything, and then your credibility is lost, a little bit. Because, I mean, you know, there are certain behaviours that change with the flick of a switch, and but there are other behaviours that are not so easily shifted, you know. And habits and things like that.”<sup>136</sup>

The SBU’s limited engagement with practice theory was also acknowledged in a co-authored paper by civil servants and an external behavioural researcher, where it was argued that the predominance of the individualist behaviour change framing above practice theory was “a reflection of the

<sup>132</sup> Two different researchers reported this in interviews.

<sup>133</sup> A research consultant.

<sup>134</sup> A research consultant (3).

<sup>135</sup> A behavioural economics book which came to be strongly associated with the UK government’s work on influence behaviours, particularly after the formation of the Cabinet Office’s Behavioural Insights Team or ‘Nudge Unit’ BBC News, 2010a.

<sup>136</sup> A DEFRA social researcher (2).

policy context at the time that the programme was conceived, where communications campaigns were a key mechanism for public policy on the environment (and elsewhere),” and that DEFRA’s officials have learnt to expand their repertoire since then.<sup>137</sup>

Perhaps because the social researchers now had more autonomy to explore other approaches than previously, the 2011 Sustainable Lifestyles Framework was the first document that DEFRA published which discusses practice theory as part of a ‘mix of methods’.<sup>138</sup> This mix includes paying attention to what are described by practice theorists as the ‘competencies’, ‘shared meanings’, and ‘materials’ which combine to sustain a social practice, as we saw in the introduction to this thesis.<sup>139</sup> For instance, in the case of promoting sustainability in transport – besides behavioural ‘barriers’ such as the belief that somebody else should take responsibility, or ‘drivers’ such as buy-in into the idea of ‘doing my bit’ – ‘competencies’ such as access to other travel options, ‘materials’ such as infrastructure quality and ‘shared meanings’ such as ‘convenience’, ‘comfort’, and ‘freedom’ are all discussed.<sup>140</sup> The mix also includes roles for regulation and fiscal approaches – which are emphasised by practice theorists and transitions theorists but relatively downplayed by behavioural theorists – although no examples of these are provided in the cases provided.

Since the publication of that framework, social researchers in DEFRA have reportedly been more sanguine about practice theory. One research consultant notes that DEFRA’s social researchers have come a long way in this regard:

<sup>137</sup> Eppel et al., 2013, p.p.41.

<sup>138</sup> DEFRA, 2011b, p.32.

<sup>139</sup> Shove et al., 2012.

<sup>140</sup> DEFRA, 2011b, p.27.

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“Funny, you know, the briefs that occasionally do come out – if you think DEFRA, [a former social researcher in the CEIB] – happily the phrase ‘think practices’ just trips off her tongue! You’ve no idea how much battle there was in this along the way!”<sup>141</sup>

Even still, academic and consultancy researchers remained doubtful as to whether social researchers have learned and applied practice theory within the domain of sustainable consumption or production to a significant extent, rather than merely making symbolic (legitimising) efforts in a bid to be seen as appeasing their critics.<sup>142</sup> From this perspective it seems that practice theory remains a ‘dormant seed’ in this domain.<sup>143</sup>

Despite the CEIB’s formation being inspired by a rise in prominence for social researchers, they not only struggled to achieve internal influence amongst new policy areas (as we saw in Chapter 4), but also considered their credibility amongst external researchers to be threatened. A tough situation indeed. And yet it is striking that social researchers did not find their work fundamentally challenged on party political grounds during this time. Their budget was cut, in line with spending reductions across the department, following the formation of the Conservative-Liberal Democrat Coalition Government in 2010. But the Chief Scientist had ensured that the social research budget was not cut proportionately more than the overall research budget,<sup>144</sup> and there was not an abrupt shift in policy direction or research interest. In this sense, social research on sustainable lifestyles was not deemed ‘politicised’ in the party political sense.<sup>145</sup>

However, the situation changed following the replacement of Caroline Spelman by Owen Paterson as the Secretary of State leading DEFRA in

<sup>141</sup> A research consultant (3).

<sup>142</sup> Boswell, 2009, p.82.

<sup>143</sup> Owens, 2015, p.132.

<sup>144</sup> A DEFRA social researcher (1).

<sup>145</sup> Brown, 2015.

September 2013. Owen Paterson now defined the department's priorities as developing rural economies, animal health, plant health, and enhancing the natural environment – with 'sustainable lifestyles' falling off the agenda.<sup>146</sup> This sudden change had implications for ongoing research projects and programmes – rendering much of this work irrelevant for policy-makers. The significance of the move was made clear to DEFRA's wider network of behavioural and practices researchers at the closing conference of the Sustainable Lifestyles Research Group in June 2014. There, according to one external consultant, a DEFRA social researcher was perceived to be declaring the end of DEFRA's interest in behavioural approaches – with the interviewee claiming that "behaviour change died" at that conference.<sup>147</sup>

At the time of the ministerial reshuffle the pro-environmental behaviours segmentation model was under review. According to what is considered best practice in social marketing, segmentation models should be renewed using recent data every five years.<sup>148</sup> The review<sup>149</sup> notes that there is currently no appetite in DEFRA for such work for a broad range of reasons – including a lack of funding, a government-wide hiatus on public communications campaigns for which a segmentation model would be useful, the prior termination of commissioning regular public attitudes surveys which would provide quantitative data on which to base the segments: "structures in the Department have changed such that it is not clear where a cross-cutting public-focussed (not policy-specific) model of this sort would sit, or who would own it."<sup>150</sup>

<sup>146</sup> A research consultant (3); DEFRA, [National Archives], 2014.

<sup>147</sup> A research consultant (3).

<sup>148</sup> Darnton 2013a, p.3.

<sup>149</sup> Darnton, 2013a, p.17.

<sup>150</sup> Darnton, 2013a, p.17.

The final of these reasons is particularly intriguing from Sheila Jasanoff’s co-production perspective:<sup>151</sup> it highlights the extent to which knowledge making practices are contingent on favourable institutional structures, and indeed how those institutional structures are dependent on the knowledge making practices. Within supportive political and institutional environments, the previous years had seen the production of new and highly valued research, which then provided opportunities for new structures to emerge – thereby facilitating the co-production of knowledge and institutional order. But now the change in DEFRA’s ministerial priorities, the dilution of the CEIB in 2012,<sup>152</sup> and subsequent embedding of social researchers into diverse policy areas has resulted in a situation where no one group of officials holds responsibility for sustainable lifestyles in general, and therefore a broad sustainability segmentation model would not have a ‘natural home’ in the department. In a sense, the other reasons listed are incidental to this one: if understanding and influencing citizens’ behaviours were to become a ministerial priority again, then we can expect that staff would be deployed to find the funding, develop an appropriate evidence-base under the circumstances, and engage with the evidence.

## **5. Social Researchers’ Influence in SCP: Starting From Where People Are At?**

The empirical material presented in this chapter has provided insights into the context in which DEFRA’s SCP team’s social researchers were able to exercise influence, and the forms of influence they achieved. It is clear that

<sup>151</sup> Jasanoff, 2004.

<sup>152</sup> Officially the centre had been made ‘virtual’, as a distributed team with no full-time member.

under favourable epistemic, political, and institutional circumstances, social research was already influential before social researchers joined the SCP team. With increasing appreciation of behavioural research across government, political leadership in David Miliband, and a willingness from policy officials to change approach in order to avoid the failures of *Are You Doing Your Bit?*, in 2006 the SCP team began to employ social researchers who would gradually alter how the team developed and implemented ideas. By then, academic and consultancy researchers were already seeing visible impacts in the *Securing the Future* report, as well as sowing dormant seeds such as the idea of developing a segmentation model.<sup>153</sup> But the social researchers, working closely with the social marketing official, were able to take this influence further by bringing the notion of ‘starting where people are at’ to the core of all SCP activity. They thereby shifted consideration of different types of citizens from a marginal afterthought to the basis on which many SCP ideas would be developed.

Key to the social researchers’ ability to achieve this influence was the fact that they were embedded analysts within the SCP team, as this afforded them proximity to the social marketing official and the generalists. Working closely with these colleagues and with the external research and advocacy groups, the social researchers built rapport with key actors and became increasingly involved in all aspects of the team’s portfolio of work. This also provided them with a platform to exercise a challenge function that went beyond what external analysts could achieve. Through challenge, researchers persuaded officials that top-down messages or incentives can be counter-productive, made the case to drop the proposal to introduce a personal

<sup>153</sup> Owens, 2015, p.132.



carbon allowance given research into citizens’ views about it, and developed innovative action-based research projects. In that way they secured a more instrumental engagement with social science, and furthermore enabled *double-loop* learning research impact to the extent that policy team to exhibited a degree of institutional reflexivity in their conception of citizens.<sup>154</sup> By encouraging the team to refrain from imposing its own goals and projects in expectation that particular groups of people would comply with them, and instead to ‘start from where people are at’, ideas like the ABRPs were developed which were more congruent with the meanings and values of citizens, and less driven by scientific policy framings. Moreover, researchers’ challenge was not considered problematic (as we might expect given the literature)<sup>155</sup> but was in fact rewarded with greater autonomy and resources to serve teams across the department through a new Centre for Expertise on Influencing Behaviours.

Notably throughout the history presented in this chapter, reflexive learning opportunities were justified on instrumental grounds. For example, the food loop project was informed by the perception that there are some ‘hard-to-reach’ groups, particularly in urban residential tower blocks,<sup>156</sup> who could be better encouraged to recycle food waste if a more open and shared approach was adopted – indeed the research consultants conclude that the project supports this hypothesis.<sup>157</sup> It follows that serving instrumental rationales for research projects does not necessarily preclude reflexive learning from taking

<sup>154</sup> Wynne, 1993.

<sup>155</sup> Norris, 1995; LSE Group GV314, 2014, p.227.

<sup>156</sup> Although the Food Loop report notes that some literature suggests these ‘hard-to-reach groups’ are now possibly more indicative of the infrastructure provided and challenges of urban life than attitudes or values associated with the socio-demographic group concerned (PSI & SEED Foundation, 2013, p.4).

<sup>157</sup> PSI & SEED Foundation, 2013, p.113.

place – as long as officials perceive some instrumental value in the projects. Instead, we see that instrumental collaborations between social researchers and policy colleagues can enable reflexive learning.

It must be emphasised however, that while DEFRA's social researchers take seriously and operationalise their commitment to providing a challenge function, the analysts balance that imperative against competing commitments they hold as civil servants. To this end, they did not find it appropriate to challenge everything from a social science perspective. For instance, opportunities were missed to use public engagement to directly shape the Climate Act in 2008. And while researchers did commission reports which challenged the prevailing individualist paradigm, they were not proactive in pursuing the implications of those studies for the policy teams' work. They also did not, for example, challenge the notion that individuals in tower blocks should be targeted for reducing food waste, instead preferring to align the policy team's goals with the actors they sought to influence. Rather, they judged that to be most effective, they had to balance the imperative to challenge with the imperative to cooperate with their colleagues. In this way they could build their credibility and influence without being seen as obtrusive to the policy-makers' aims. Indeed we could say that the balance they achieved between these two imperatives, while inevitably exposing them to criticism, also enabled them to influence policy by 'starting from where their colleagues were at'.

Further consideration of the experiences of researchers in the SBU and CEIB lends support to a Jasanoffian co-production<sup>158</sup> argument, with the production and reception of the content of social research being co-produced

<sup>158</sup> Jasanoff, 2004.

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with the analytical structures in which social researchers operate. With social researchers embedded within the SCP team, the research they produced and its application reflected the growing view that social research should be embedded at the core of the SCP team’s activities. Their move to the CEIB afforded social researchers more autonomy and flexibility in the work that they produced, and enabled them to capitalise on the new interest they had acquired from policy teams across the department. But the shift from being embedded within the SCP team towards being placed at the boundaries of policy teams meant that social researchers were working at the margins of policy teams’ activities. This provided limited opportunity to build the rapport on which effective challenge was predicated within the SCP team. The recent shift back to embedding analysts in turn provides the opportunity for analysts to develop those relationships again.

While acknowledging the restrictions and susceptibilities of social researchers’ challenge function, the data presented in this chapter do suggest a rethink of the view that reflexivity must be instilled in a government department from the outside. Social researchers’ challenges have enabled assumptions about citizens’ views and actions to be constructively altered within SCP policy areas, with implications for government action. It follows that we must call into question the latent assumption in the STS literature that government departments have a reflexivity deficit which can only be addressed through better interactions with academic social scientists. Rather, this chapter suggests that efforts to make these departments more reflexive can be driven endogenously, from within the same institution. In this way, social researchers could potentially be part of a ‘formal organisational

mechanism'<sup>159</sup> for enabling the type of reflexive learning envisioned by Pallett and Chilvers (and other STS researchers). This is not to suggest that external support is not necessary. Indeed, we have seen that challenge from outside DEFRA contributed to the context in which officials began to consider it necessary to bring in social research and social marketing expertise. We will return to this point in the analytical conclusions, where we consider how social researchers' 'capacity to challenge' might be strengthened in future.

Furthermore, the finding that reflexivity is being driven through endogenous forces in DEFRA is consistent with Gibbons et al.'s point that actors within research organisations where research is produced in the context of application, such as DEFRA, are likely to exhibit reflexivity.<sup>160</sup> Yet contra their argument, reflexivity has been cultivated through the work of internal social researchers rather than as a result of scientists' experiences working on complex social and technical issues.

Last, this chapter has provided an initial response to Webster's observation that there is an absence of STS research on the epistemic dynamics within government departments. It does this by showing how new forms of knowledge come to be recognised and utilised in different ways within the SCP policy area. Yet, in shedding a light on these dynamics within the civil service, this chapter raises more questions than it answers. Where does the fall in prioritisation of sustainable behaviour change work leave social researchers' role in policy development and delivery in future years? How do social researchers' authority and challenge function in SCP compare with other areas of DEFRA's remit? How do interdisciplinary collaborations

<sup>159</sup> Pallett and Chilvers, 2013, p.1175.

<sup>160</sup> Gibbons et al., 1994, p.7.

between social researchers and other officials work in areas that have a stronger economic or natural science framing than sustainable consumption – for instance animal health, flooding, or genetically modified crops? Chapter 4 has shown that social research is now included and appreciated in these areas, but further research is required to investigate how the analysts fare in new and ever-changing epistemic, political, and institutional contexts. The next chapter leaves DEFRA aside, to explore the forms of influence DECC’s social researchers achieved in policy areas relating to citizens’ energy use.

## Chapter 7

# Influencing Behaviours in DECC? Social Researchers and Energy Use

“So we’re the game keeper and they’re the poacher in a way. And you know there isn’t a process for turning poachers into game keepers, really. Because it wouldn’t be particularly appropriate.”

- A policy official in the Smart Meters Implementation Programme team

### 1. Introduction

THE PREVIOUS CHAPTER explored the influence that DEFRA’s social researchers had within a specific policy area. The same question can be applied to social research in DECC. This chapter does this by focusing on the Customer Insight Team’s (CIT) engagement with policy teams concerned with energy efficiency or demand reduction. Throughout DECC’s history and despite multiple reorganisations, these teams have been grouped together under the same Director-General (briefly under the name of the ‘Energy Efficiency Development Office’)<sup>1</sup> – and invariably kept distinct from

<sup>1</sup> Between late 2011 and late 2013. See DECC, 2012c, p.9; DECC, 2013c.

the energy supply teams. It is the energy efficiency and demand reduction teams that seek to engage citizens so as to reduce the carbon emissions associated with energy demand. They are therefore concerned with behaviour change in a similar way as DEFRA’s sustainable consumption and production policy team was, and were also the first areas which came to build capacity for social research, as we saw in Chapter 5. Yet, the approaches to behaviour change and the roles that social researchers have played within these specific policy teams in DECC differ considerably from what we saw in DEFRA. For these reasons, policy teams associated with energy efficiency and energy demand reduction are ideal case studies for exploring social researchers’ influence in DECC.

Within DECC’s work on energy demand and energy efficiency, there is a great variety of candidate policy areas to select for exploring social researchers’ influence. Under the Labour Government, plans included a ‘pay as you save’ finance scheme for home refurbishments and the installation of smart meters, developing information and incentives for households to reduce their energy consumption, establishing community-based schemes to engage groups of people to save energy, stimulating greater interest in domestic sources of renewable energy, and legislating to raise building standards.<sup>2</sup> The Coalition Government’s vision for energy efficiency was broadly consistent with Labour’s, and included the pay as you save scheme, installing smart meters across UK homes, mandating Energy Performance Certificates (which rate the energy efficiency of a property), introducing ‘smarter’ domestic heating controls as the key mechanisms for reducing demand for heating and electricity in UK homes,<sup>3</sup> and setting a target for

<sup>2</sup> HM Government, 2009, p.79.

<sup>3</sup> DECC, 2011b, p.38.

domestic buildings to emit almost zero carbon emissions before 2050<sup>4</sup> - noting that over 75% of domestic energy consumption arises from demand for space and water heating.<sup>5</sup> Most of these policy areas arose in interviews, but to limit the scope of this chapter, Sections 2, 3, and 4 focus on three policy teams in particular: the Green Deal team, the Smart Meters Implementation Programme team (SMIP), and the Heat Strategy team respectively. These policy areas were selected because of the extent of interview and documentary data available.

In each case, policy solutions were initially framed along contestable determinist lines – either technologically determinist<sup>6</sup> (in terms of insulation measures or microgeneration under the Green Deal, or the use of smart meters and in-home displays for the smart meter roll-out) or else involved a narrowly individualised form of determinism in which attitudes were thought to universally and predictably explain households' energy-using behaviours (as in the case of domestic heating policy, where it was assumed that particular households hold identifiable attitudes which determine their level of energy consumption). As we will see, social researchers have increasingly contributed to decision-making processes within the domain of energy efficiency and demand reduction. Furthermore, research has enabled the challenging of determinist assumptions to varying degrees for the different policy teams involved. But such challenge did not lead to more reflexive policy designs during the years of the Coalition Government (2010-

<sup>4</sup> DECC, 2011b, p.30.

<sup>5</sup> DECC, 2011b, p.29.

<sup>6</sup> Technological determinism is the view that technologies will shape peoples' actions in universal and predictable ways (Winner, 1980). Analysts in STS have claimed that it is persistently believed by policy-makers (Wyatt, 2008).



2015). We begin by considering the Green Deal team, which is where the CIT was initially based after being formed in mid-2010.

## **2. Green Dealin’ With It**

### **2.1 Background**

The Green Deal is an energy efficiency initiative based on the concept of ‘pay as you save’, which was advocated in a DECC-funded report by the UK Green Building Council in 2009.<sup>7</sup> Under a ‘pay as you save’ arrangement, property owners borrow money from government to install energy saving measures (such as loft insulation). Consumers then pay off the debt as financial savings accrue from the reductions in energy bills (assuming that such savings are in fact realised). The finance mechanism is not strictly a loan, because the costs are payable by whoever pays the utility bills.<sup>8</sup> If there is a change of residency, the new residents pay the remaining debt through their bills. Green Deal finance was available to citizens between January 2013 and July 2015, when the scheme was closed to new applicants.<sup>9</sup>

The Green Building Council proposed a pay as you save scheme to achieve ‘a step change’ in energy efficiency in buildings. They argued that this was necessary if the UK Government’s targets for reducing carbon emissions by 80% by 2050 were to be achieved. Their rationale was based on the observation that 45% of UK carbon emissions come from energy used in buildings, and from the expectation that 80% of the domestic buildings that will be inhabited in 2050 are already standing. The authors also noted that in

<sup>7</sup> Green Building Council, 2009.

<sup>8</sup> Green Building Council, 2009, p.6.

<sup>9</sup> Yeo, 2015.

a recent survey, 15% of respondents would be attracted by a pay as you save mechanism for funding energy efficiency in the home.<sup>10</sup>

The pay as you save idea was seen by political leaders as a cheap and easy way to achieve reductions in carbon emissions while helping to save consumers money, and so there was strong political support for it ahead of the general election in 2010 - such that the idea featured in each of the Conservative,<sup>11</sup> Labour<sup>12</sup> and Liberal Democrat<sup>13</sup> party manifestos. The name 'Green Deal' was chosen by the Conservatives<sup>14</sup> and was used in the Coalition Agreement.<sup>15</sup> Following Kingdon, then, we see that the political, problem, and policy streams were aligned from around 2009 to form a clear policy window for the Green Deal idea to be developed.

Notably however, the idea was never tested against alternatives. A pilot study was commissioned by DECC and the Department for Communities and Local Government in late 2009, which compared consumer reactions towards particular elements of a pay as you save model (such as the degree of choice over who makes the installations, how the process should be managed, and how best to communicate with them about the process or costs).<sup>16</sup> But the effectiveness of a pay as you save approach was never piloted against alternative models, even in the next few years during which time randomised controlled trials (RCTs) were highly valued within DECC.

Yet, the Green Deal was touted by Chris Huhne and other ministers as an ambitious policy – 'revolutionary', even – for improving energy efficiency in

<sup>10</sup> Green Building Council, 2009, p.7.

<sup>11</sup> The Conservative Party, 2010, p.93.

<sup>12</sup> The Labour Party, 2010, 8:4.

<sup>13</sup> The Liberal Democrat Party, 2010, p.53.

<sup>14</sup> The Conservative Party, 2010, p.93.

<sup>15</sup> HM Government, 2010, p.16.

<sup>16</sup> DECC & Energy Saving Trust, 2011.

the domestic sector on a mass scale.<sup>17</sup> Moreover, it was described as a scheme that could appeal to “every one of the 26 million homes in the UK”.<sup>18</sup> Not only was the scheme expected to achieve high uptake then, but also to have universal appeal across diverse groups in society.

The scale of ambition in politicians’ rhetoric was nearly matched in the first economic impact assessment for the policy, which was published in December 2010 in preparation for the first reading of the Energy Act 2011 in Parliament.<sup>19</sup> The range of eligible insulation measures was not settled at this point,<sup>20</sup> but Table 3<sup>21</sup> gives an indication of the level of ambition held in terms of the expected number of different types of insulation in domestic buildings between 2013 and 2020.<sup>22</sup>

**Table 3: Expected Total Number of Installations for Each Measure Between 2013-2020, According to DECC’s Impact Assessment (2010)**

<b>Measure</b>	<b>Expected number of installations (m)</b>		
	<b>Low</b>	<b>High</b>	<b>Maximum feasible</b>
Loft insulation	2.3	3.4	4.5
Cavity wall insulation	0.5	2.3	4
Solid wall insulation	1.8	2.2	3.1
Double-glazed windows	0.7	1	1.4
Party wall insulation	0.5	0.7	0.9
Insulated doors	1.3	1.9	2.5
Total number of installations	7.1	11.5	16.4

<sup>17</sup> Huhne, 2010; DECC, 2010a; Eyre & Rosenow, 2013; House of Commons: Energy and Climate Change Committee, 2013.

<sup>18</sup> DECC, 2010a.

<sup>19</sup> DECC, 2010b.

<sup>20</sup> DECC, 2010b, p.79, fn.124. Eventually the list would include new boilers, microgeneration sources, heat pumps. DECC, 2011c.

<sup>21</sup> DECC, 2010b, p.19.

<sup>22</sup> DECC, 2010b, p.19.

In eight years then, the Government would aim for 7-11.5 million energy efficiency installations to be completed in the domestic sector – some of which would occur in the same home as part of a package.<sup>23</sup>

The Government guaranteed that finance would only be available for interventions for which the expected financial savings for a bill-payer would be greater than the costs of installation.<sup>24</sup> It was acknowledged that the initiative's effectiveness for reducing energy consumption relies on what the inhabitants do after any installations are completed.<sup>25</sup> Moreover, the authors appreciated that "the responses of consumers are currently not well understood",<sup>26</sup> noting that the prevalence of subsidies and grants for energy insulation measures in the past and the 'novel' nature of the scheme make it difficult to anticipate its success. The impact assessment emphasised that research projects were planned to address this.<sup>27</sup> With the CIT in place, the next subsection will consider how insights from social research projects were utilised.

## 2.2 Commissioning Social Research

As is clear from the background above then, in 2010 when the CIT was formed, its members found that their host team was working on a high profile and highly ambitious policy where commitments had already been made to a 'pay as you save' framing. As such, the Green Deal team were interested in funding research that would help to improve the delivery

<sup>23</sup> Indeed in mid-2011 Greg Barker went further – claiming 14 million homes would be reached in the first decade, and 26 million before 2030: DECC, 2011d.

<sup>24</sup> DECC, 2010b, p.14.

<sup>25</sup> DECC, 2010b, p.14.

<sup>26</sup> DECC, 2010b, p.7.

<sup>27</sup> DECC, 2010b, p.18.

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(rather than design) of the policy. The Head of Customer Insight (HCI) started by working closely with the Green Deal generalists to establish what sort of short-term research projects would be deemed useful.

Between December 2010 (when the first impact assessment was completed) and November 2011, the CIT commissioned and published three research projects which identified potential setbacks and opportunities to overcome them.<sup>28</sup> These were designed to explore public attitudes towards the Green Deal idea, to identify barriers to its uptake, and to reveal how the policy could be made most salient for the potential customers.<sup>29</sup> One project highlighted that the Green Deal might be more popular if customers were given the choice to pay off the debt ahead of the agreed payment schedule.<sup>30</sup> This was then incorporated into the implementation of the policy. The second study highlighted that the consumer interest may be less of a ‘step-change’ than had been anticipated and therefore more resources would be needed to ensure its success.<sup>31</sup> The third brought attention to the specific difficulties that would arise for making the policy work in the private rented accommodation sector, where the bill-payer typically does not own the property.<sup>32</sup>

All three of these projects were intended to enable single-loop learning about how to improve the Green Deal, rather than to challenge its underlying assumptions. A social researcher recalled that these insights were

<sup>28</sup> DECC, 2011c, p.204.

<sup>29</sup> DECC, 2011c, p.204.

<sup>30</sup> DECC, 2011e, p.24.

<sup>31</sup> DECC, 2011f.

<sup>32</sup> DECC, 2011g; DECC, 2011c, p.209.

appreciated by the Green Deal policy team and as such they achieved some 'visible, short-term'<sup>33</sup> impact:

"I think all of the Green Deal work was quite influential – like, showing that the demand for Green Deal was likely to be quite low probably led to a massive kind of push on trying to make it more appealing from a policy perspective – I'm not saying that it was only the social research that did it, but I think they were kind of clear examples."<sup>34</sup>

Changes were then made that would make the scheme more appealing to customers, such as enabling customers to pay back the debt early. The Treasury Office also gave an additional £200m to be used to provide discounts for the first customers.

But besides this immediate impact, the studies also formed the basis of a challenge to two key assumptions – first, that the policy could reach almost every household in the UK, and second, that it would have universal appeal across society. This resulted in revised estimates in the consultation-stage economic impact assessment, published in November 2011.<sup>35</sup> For this, two new variables based on the research were introduced into the economists' model. First, the analysts introduced a 'decision making frequency'<sup>36</sup> variable to capture the likelihood that energy consumers will encounter the choice of taking up the Green Deal or not. Second, a 'consumer choice coefficient' was defined to take into account the likelihood that survey respondents would pursue specific domestic energy efficiency improvements.<sup>37</sup> Together, these

<sup>33</sup> Owens, 2015, p.127.

<sup>34</sup> A DECC social researcher (2).

<sup>35</sup> DECC, 2011c.

<sup>36</sup> DECC, 2011c, p.181.

<sup>37</sup> DECC, 2011c, p.181. See also DECC, 2012d, p.130, for a more explicit (but seemingly erroneous) discussion of how these variables were used to calculate a utility function to estimate Green Deal take-up.

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variables were used to estimate the likely consumer uptake of different measures available under the Green Deal.

It is striking that the expected number of installations dropped significantly in this economic assessment compared to its December 2010 predecessor. Whereas the first impact assessment estimated take-up to be in the region of 12 million between 2013 and 2020, the winter 2011 update now projected take up to reach approximately 3.6 million households before 2022.<sup>38</sup> Instead of targeting millions of households per year, the Government aspired to reach hundreds of thousands.

Besides scaling down ambitions, the commissioned social research also showed that the Green Deal would have more appeal amongst some citizens than others:

The survey showed that the groups with higher levels of interest in taking up a Green Deal offer were younger, male, those on means tested benefits, households needing two or more energy efficiency measures, those with homes that are hard to heat, those who struggle to pay their bills, those who live in rural areas and the affluent.<sup>39</sup>

Hence, in addition to providing an instrumental function for estimating the likely number of installations made under the Green Deal, the same social research challenged the assumption that, supplied with the right incentive and information, the Green Deal could appeal to all types of people in society. The evidence suggested that some groups were more likely to be attracted by the offer of finance to install energy efficiency measures than others were.

The scaling down of expectations between the first two economic impact assessments was noticed by the Committee on Climate Change, who

<sup>38</sup> DECC, 2011c, p.75.

<sup>39</sup> DECC, 2011c, p.206.

considered it to be a watering down of ambition.<sup>40</sup> Over the next few months further doubts would be raised over the scheme's likely success, since it now lacked support from high street retailers, was considered complicated for customers, and was described as too expensive.<sup>41</sup>

In this context there was greater pressure on policy-makers to ensure that the Green Deal would be as salient to customers as possible. For social researchers, it clearly followed from their research projects that DECC needed a better understanding of who the Green Deal's customer was likely to be. Having now built a rapport with the Green Deal generalists and a deep familiarity with social dimensions of the Green Deal scheme, the CIT was well placed to think more autonomously of research projects that could help to improve the Green Deal's implementation, and that the policy officials might agree to fund. The analysts proposed a larger piece of research to develop a segmentation model to understand different groups' likely interest in the initiative. A social researcher who subsequently worked on the segmentation model explained the rationale thus:

"We'd done some research on the general population, we understood quite a lot about peoples' motivations and barriers to energy efficiency, but we soon began to realise that actually this isn't a one-size-fits-all policy really. We don't understand enough about what sorts of groups exist within these sorts of populations of everyone. It's quite, you know, unique for a '*product*' – which is almost what it is – to be targeted at everyone. Most kinds of things wouldn't be targeted at everyone."<sup>42</sup>

The quotation captures how the social research initiated a rethink about the framing of the Green Deal for citizens. The Green Deal communications and policy teams now started to see their scheme as a 'product' for a distinct

<sup>40</sup> Committee on Climate Change, 2011.

<sup>41</sup> Cuff, 2012; Gosden, 2012; Eyre and Rosenow, 2012.

<sup>42</sup> A social researcher in DECC (7).



audience. In this way, the research achieved the ‘conceptual’<sup>43</sup> use of research amongst policy officials and enabled a degree of double-loop learning,<sup>44</sup> with the potential for this to lead to a change in the policy frame in the future, perhaps in more conducive circumstances.<sup>45</sup>

When commissioning the Green Deal segmentation model, researchers in the CIT were aware of DEFRA’s pro-environmental behaviours model (discussed in the previous chapter). But, having considered evidence suggesting that pro-environmental attitudes were not well correlated with behaviour change towards lowering energy use,<sup>46</sup> and at a time where there was a government freeze on all ‘non-essential’ communications campaigns,<sup>47</sup> they opted for a product-specific rather than a strategic, broad-based model (shown in Figure 7 overleaf). To this end, the segmentation model was built around survey data about public views towards the Green Deal – such that the claim that a loan-like arrangement would function as an effective incentive for households to invest in energy efficiency remained an unquestioned assumption (rather than a hypothesis to be tested).<sup>48</sup> The underlying data collection survey included questions to ascertain whether participants would be willing to agree to the Green Deal loan-type scheme,

<sup>43</sup> Nutley et al., 2007, p.36.

<sup>44</sup> Argyris and Schön, 1978, pp.18-26.

<sup>45</sup> Owens, 2015, pp.132-136.

<sup>46</sup> A DECC social researcher (1).

<sup>47</sup> Cabinet Office, 2010.

<sup>48</sup> As is clear, for instance, from the model’s inclusion of factor 6 (whether participants claim to ‘only take out loans when necessary’) as a causal variable, see DECC, 2012f, p.22. The finance arrangement was identified by an unreported number of participants in an earlier survey as a motivating factor amongst people who expressed interest in the Green Deal, but it was amongst the least frequently recognised advantages by survey participants when prompted, and the attractiveness of the pay as you save scheme was not tested against alternative packages (involving, perhaps, grants or subsidies). DECC, 2011f, pp.12-15.

and how they might be encouraged to do so.<sup>49</sup> But the survey did not explore to what extent the finance scheme would appeal to the different segments identified, and how it compared against alternatives.

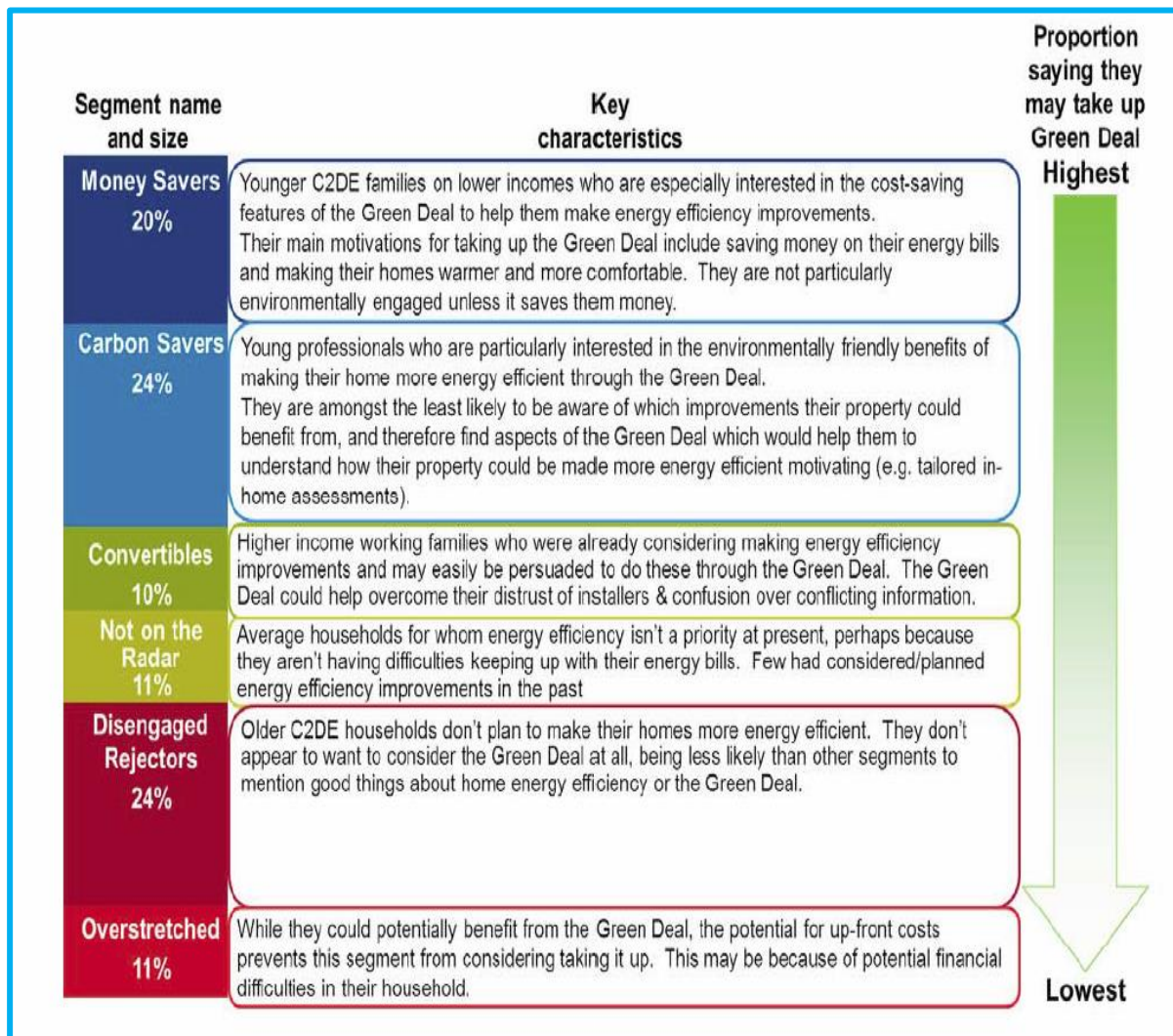


Figure 7: Green Deal Segmentation Model (DECC, 2012e, p.4)

Moreover, to focus the segments on understanding the Green Deal's likely customers, a subset of the survey (33%) who did not self-report a 'need' for either solid wall insulation, cavity wall insulation, loft insulation, or boiler

<sup>49</sup> DECC, 2012f, p.19.

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insulation or upgrade were removed from the segmentation base. Of the remaining survey base, the six segments in the diagram above emerged.

The segmentation model was thus clearly designed to serve end-of-pipe<sup>50</sup> communication functions. It was not intended to help government to develop policy ideas starting from ‘where people are at’ on energy efficiency in the home, nor does this application appear to have been considered.

The research project was well-received by the Green Deal team, and was put to use immediately to help identify communications channels for reaching different audiences:

“It’s a nice example of something actually informing real choices in policy. Particularly in terms of the comms side – so yeah, when we did the advertising – we don’t at the moment – but when we did some advertising for the Green Deal it helped to identify which media partnerships to go with.”<sup>51</sup>

The same researcher recalled that the model highlighted that many people for whom domestic energy efficiency was a salient issue were already considering making renovations at home. With this in mind, the team chose to place advertisements (such as the examples in Figure 8 on the next page) in publications related to home improvements<sup>52</sup> as well as in national newspapers and elsewhere.

Subsequent analysis found that a disproportionately high number of the people who paid for a Green Deal assessment before September 2013 were in the ‘convertibles’<sup>53</sup> segment – suggesting that the Green Deal marketing was more effective at engaging people who had already considered energy

<sup>50</sup> Lowe et al., 2008, p.230.

<sup>51</sup> A social researcher in DECC (7).

<sup>52</sup> E.g. Low Cost Living House magazine, Ideal Home Show magazine (see Left Foot Forward, 2014).

<sup>53</sup> DECC, 2014d, p.20.

efficiency recently than making this ‘novel’ initiative salient to people who were either disengaged with insulation measures or already concerned about saving money and/or reducing carbon emissions.



**Figure 8: Two Green Deal Advertisements Placed in Home Improvement Publications (both images were downloaded from DECC, 2013d)**

The Green Deal segmentation model was clearly considered useful, then. Yet, the researchers have not applied this (or any other) segmentation model to help develop policy from the design stage in DECC. And while the CIT did collaborate with the Behavioural Insights Team (BIT) to run a behavioural trial for the Green Deal, that was designed to test the hypothesis that providing a service to clear space in a household's loft at the same time

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as insulating the loft would improve the salience of installing loft insulation.<sup>54</sup> Hence, although the researchers successfully challenged colleagues’ assumptions that the Green Deal would have universal appeal and could be taken up by approximately 12 million households, their ‘challenge function’ did not engender a more institutionally reflexive<sup>55</sup> policy for engaging citizens on energy efficiency issues.

## 2.3 Dealing With the Green Deal Implementation

After the launch of the Green Deal in January 2013 the scheme’s low uptake rate was frequently reported in the national press,<sup>56</sup> with its failure predominantly attributed to the interest rate on repayments being set too high.<sup>57</sup> The Green Deal policy was scrapped by Amber Rudd in July 2015, shortly after she became the Secretary of State leading DECC in the Conservative Government. Total take-up before June 2015 was in the region of 15,600 according to DECC’s statistics.<sup>58</sup> Rudd explained that she cut the scheme because it no longer offered “value for money”.<sup>59</sup>

The scheme’s apparent failure was attributed to various causes – it was described as too expensive and too complicated for customers, while policy-makers were accused of failing to “understand the behavioural barriers

<sup>54</sup> DECC, 2013b.

<sup>55</sup> Wynne, 1993, p.322.

<sup>56</sup> The Telegraph (2012) reported that no assessments were requested in the first month that this was possible. The BBC reported that only four customers committed to a deal within six months of the full launch (BBC News, 2013a), and less than a thousand had an agreement in place by November 2013 (BBC News, 2013b).

<sup>57</sup> Business Green, 2015.

<sup>58</sup> DECC, 2015a, p.5.

<sup>59</sup> Yeo, 2015.

preventing wide-scale take-up of energy efficiency measures”.<sup>60</sup> But early indications suggest that policy officials have learnt lessons from the research projects for future schemes. One generalist working in the Home Energy team, who agreed to be quoted anonymously, has recently claimed in a closed audience that a future pay as you save scheme would need to be better targeted to specific groups of people:

“There probably was a market for the Green Deal but it was somewhere in between people in fuel poverty who probably wouldn’t be able to afford it and where it might not be appropriate to take out a loan, and others who could afford to do it without a loan”.<sup>61</sup>

He then stated that recognising the variation amongst the population would lead them to target approximately four million households, rather than all households in the UK. Hence, lessons from the social researchers’ research projects from 2011/12 have been used to inform the next policy idea, so that interventions can be designed with an expectation of diversity amongst citizens, rather than along deterministic lines. The social researchers’ projects may therefore also be considered dormant seeds whose deeper implications were waiting for more suitable conditions in which to spring to life.<sup>62</sup>

The policy teams dedicated to this work are now well positioned with experience and relevant social research evidence to form the basis of more reflexive and effective policy designs than those of 2009/10. It now remains to be seen how they will fare in the new Department for Business, Energy and Industrial Strategy (DBEIS).<sup>63</sup>

<sup>60</sup> House of Commons Energy and Climate Change Committee, 2015, p.13.

<sup>61</sup> A Home Energy policy official in DECC.

<sup>62</sup> Owens, 2015, p.132.

<sup>63</sup> BBC News, 2016.

## 2.4 Conclusions on the Concluded Green Deal

This section highlighted how social research has played a predominantly instrumental role in shaping the Green Deal – while also, to a very limited extent, enabling the possibility for more reflexive dialogue about the underlying premise of a pay as you save scheme. Although this mechanism for financing domestic insulation measures featured in the manifestos of each of the major British political parties in 2010, its effectiveness was never empirically tested against alternatives. The CIT did achieve success in encouraging colleagues to ‘think people more’, and they convincingly challenged two central assumptions regarding the ambition and nationwide appeal of the scheme. They showed that the policy would attract some citizens more than others, and would be unlikely to reach households on the scale envisioned by politicians. Yet, despite developing a segmentation model and experimenting with a RCT, their customer insights have yet to contribute to policy design processes in a more reflexive way – by ‘starting where the people are at’. The Government’s next scheme may provide an opportunity for a more reflexive approach.

The next section considers a second high-profile energy efficiency policy programme where DECC’s social researchers were involved relatively late in the policy development process: the smart metering implementation programme.

### 3. Rolling with it: The Smart Meter Roll-Out

#### 3.1 Background

A 'smart meter' is a device that can be connected to a property's electricity or gas supply network to record fuel consumption data.<sup>64</sup> The data can be securely transmitted to the energy supplier, the bill-payer (via an in-home display, 'IHD', or via other connected devices) and potentially to anybody else with the customer's permission.<sup>65</sup>

In October 2008, in his first speech as a Minister of State for Energy and Climate Change, Lord Philip Hunt announced government plans for regulation to allow the installation of smart meters by energy suppliers to all homes in Great Britain before 2021.<sup>66</sup> The Labour Government's rationale for regulating a mandated installation followed from the expectation that they would bring a wide range of benefits for energy suppliers, their consumers, and additionally to the public in general. The Government believed that if energy suppliers started to install smart meters without intervention, the latter might design them such that consumers would get 'locked in' because each firm could feasibly make meters compatible only with their own systems.<sup>67</sup> Furthermore, it was claimed that despite potential benefits for various actors in the system, without government intervention only half of the maximum number of meters would be replaced, and the benefits would

<sup>64</sup> DECC, 2013e, p.1.

<sup>65</sup> DECC, 2013e, p.2.

<sup>66</sup> House of Lords, Debate: 28 October 2008, Volume: 704, Column 1516.

<sup>67</sup> DECC, 2009a, p.12.



not be shared equally across the actors involved.<sup>68</sup> Finally, in a context of commitments to reducing carbon emissions in the domestic sector by 29% by 2020 (based on 2008 levels),<sup>69</sup> smart meters were considered important for catalysing a change in UK households’ behaviour, through the provision of tailored energy use information.<sup>70</sup>

For all of these reasons, provisions were made for a possible mandated roll-out in the Energy Act 2008.<sup>71</sup> In summer 2009, the European Union ruled that its member states should introduce smart meter-type technology, contingent on a favourable economic analysis.<sup>72</sup> A commitment to mandating the installation of smart meters in UK homes then featured in the Labour<sup>73</sup> and Conservative<sup>74</sup> party manifestos in 2010, and was subsequently pursued by the (Liberal-Democrat led) DECC in the Coalition Government.<sup>75</sup>

Government economists drafted many economic impact assessments between 2008 and 2013. The first was published by the Department for Business, Energy and Regulatory Reform (BERR) in April 2008.<sup>76</sup> That assessment reported that while the economic case for the installation of smart meters in small and medium-sized enterprises (SMEs) was strong, for domestic settings it was less apparent that a roll-out would be cost-effective. But assessments produced after Lord Hunt’s announcement reported a more favourable economic case for the mandated installation of smart meters in

<sup>68</sup> BERR, 2008a, Annex A: p.8.

<sup>69</sup> HM Government, 2009.

<sup>70</sup> BERR, 2008a, Annex A: p.8.

<sup>71</sup> HM Government, 2008, p.80ff.

<sup>72</sup> DECC, 2009a, p.12.

<sup>73</sup> The Labour Party, 2010, 8:4.

<sup>74</sup> The Conservative Party, 2010, p.92.

<sup>75</sup> HM Government, 2011, p.48.

<sup>76</sup> BERR, 2008b.

SMEs *and* across 30 million homes by 2021.<sup>77</sup> The change in the perceived cost-effectiveness for the domestic sector roll-out between April 2008 and May 2009 was explained by reference to revised assumptions about risks and optimum biases in the estimates.<sup>78</sup>

The impact assessment was updated in December 2009, coinciding with the Government's response to evidence put forward in a public consultation over the most appropriate model for rolling out smart meters across the UK. The Government opted for installations to be managed by energy suppliers, with central government coordination for public communication.<sup>79</sup> It was claimed that this would be the most time-efficient<sup>80</sup> and cost-effective policy option.<sup>81</sup> It is worth considering the December 2009 domestic sector cost-benefit review in closer depth. As we will see in Subsection 3.2, social research would eventually challenge underlying assumptions regarding how smart meters are used in practice by citizens – with implications for the realisation of consumer benefits.

The impact assessment stated that smart meter benefits would amount to £6.2bn for retailers and £7.0bn for customers, spread over 12 years as the chosen period for the calculation.<sup>82</sup> The list of benefits for energy suppliers included: i) an end to scheduled visits for meter readings, ii) savings from handling fewer customer enquiries or complaints, iii) efficiencies associated with the afforded ability to remotely cut supply to a household, iv) cheaper operational costs associated with pre-payment meter services, v) more

<sup>77</sup> Leading some to accuse government of 'cooking the books' – Henney and Anderson, 2012, p.2.

<sup>78</sup> National Audit Office, 2011, p.8.

<sup>79</sup> DECC, 2009b, p.18.

<sup>80</sup> DECC, 2009b, p.18.

<sup>81</sup> DECC, 2009a, p.33.

<sup>82</sup> DECC, 2009a, p.3. For the non-domestic roll-out, consumer benefits were estimated at £2.79bn, with £0.4bn worth of value for suppliers.

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efficient handling and recovery of consumer debt, vi) improved capacity to identify theft, vii) reduced wastage in the network operation, viii) lower costs associated with a consumer’s change of supplier, and ix) a reduction in the investment required for future generation capacity due to consumers shifting to off-peak time of consumption, following the introduction of time-of-use tariffs.<sup>83</sup>

For consumers,<sup>84</sup> the main benefits were assumed to be financial savings following their use of IHDs to aid them to reduce energy consumption. Although evidence was limited, empirical studies had found that smart meters contributed to year-on-year reductions of approximately 3% in ‘long-term’ studies (of no more than three years).<sup>85</sup> From this, the analysts made ‘conservative’ estimates that gross annual reductions would be achieved of 2.8% for electricity, 2% for gas consumers with credit-based accounts, and 0.5% for gas consumers using prepayment systems, over 12 years.<sup>86</sup> Also listed under consumer benefits were reductions in carbon emissions associated with lower energy consumption.

The above consumer benefits were expected to be uniformly distributed across all energy consumers but it was also expected that 20% of customers would benefit from financial savings due to shifting their consumption

<sup>83</sup> DECC, 2009a, pp..26-28.

<sup>84</sup> DECC, 2009a, pp..24-26.

<sup>85</sup> See DECC, 2009a, p. 25. Estimates were informed by Sarah Darby, 2006, p.11.

<sup>86</sup> i.e., Gas consumers with a credit-based payment system could expect that after 12 years with a smart meter, their energy consumption will be 67% of what it otherwise would have been in the counterfactual scenario where they did not have a smart meter installed. To put these numbers in perspective, DECC’s subsequently commissioned analysis estimates that behaviour changes such as turning the thermostat down by 2°C can result in reductions of approximately 13% in gas use, while delaying to turn on the heating in a home from October till November can result in savings of 5.5% (Cambridge Architectural Research, 2012, p. 27). Savings of 33% over twelve years may therefore be possible, provided that all households hold a sustained commitment to using smart meters to initiate many changes in their home.

patterns under time-of-use tariffs.<sup>87</sup> Furthermore, a minority of consumers would benefit from connecting their smart meters to their microgeneration sources.<sup>88</sup> The costs would be passed on to all energy customers through utility bills at approximately £235 per household.<sup>89</sup> As such, it is worth noting that for the domestic roll-out, the costs were estimated to exceed consumer benefits by £1.65bn.

The Coalition Government maintained the previous Government's commitments to mandating a supplier-led roll-out of smart meters.<sup>90</sup> Updates to the economic impact assessment between 2010 and 2013 identified the same sources of consumer benefits as discussed in December 2009, but key changes include: treating reductions in carbon emissions as 'UK-wide' benefits rather than 'consumer benefits',<sup>91</sup> an unexplained increase from 12 to 18 years for the period of analysis,<sup>92</sup> and a reduction in estimates of net carbon emissions saved by 2030 due to changes in projected energy consumption.<sup>93</sup> In addition, the Coalition Government clarified that consumers could refuse to have new meters installed,<sup>94</sup> but nonetheless, economic models assumed that 97% of the 26 million homes in the UK would have a smart meter successfully installed.<sup>95</sup> Notably, in this final analysis,<sup>96</sup> calculated over an 18-year period, expected net benefits for suppliers

<sup>87</sup> DECC, 2009a, p.25.

<sup>88</sup> DECC, 2009a, p.26.

<sup>89</sup> DECC, 2009a, pp.22-23.

<sup>90</sup> HM Government, 2010, p.16.

<sup>91</sup> DECC, 2013f, p.61.

<sup>92</sup> DECC, 2013f, p.3.

<sup>93</sup> DECC, 2010c, p.23.

<sup>94</sup> Richards et al., 2014, p.10. See also House of Commons, Debate: 29 November 2011, Volume: 536, Column: 903W.

<sup>95</sup> This is according to the National Audit Office, (2011, p. 26), but is not explicitly stated in the quoted economic impact assessment (DECC, 2011h).

<sup>96</sup> DECC, 2013f, p.3.

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(£9.07bn) now exceeded those for consumers (£6.3bn), and projected total benefits (£18.8bn) significantly outweighed total costs (£12.1bn).

It was acknowledged since before the Coalition Government’s formation that smart meters alone do not reduce energy consumption. Indeed, left to their own devices they increase energy use as they are connected to the mains power supply. Hence, the consumer benefits described in the economic impact assessments crucially relied upon expectations about property inhabitants’ behaviour change. To this end, the economists did consistently refer to the available social research – even prior to DECC’s recruitment of social researchers.<sup>97</sup> Yet, the assumption that year-on-year energy savings could be maintained for 18 years following the installation of a smart meter remained untested by empirical studies. And as noted in the GO-Science review, DECC suffered from a lack of ‘people thinking’ in its early years and smart metering policy was no exception:

[B]ehavioural or social issues about bringing society along with the policy agenda had not previously been thought about, e.g. on Smart meters, how behavioural change was going to be achieved.<sup>98</sup>

In spring 2011 this was, to an extent, about to change. Although it would not be possible to test the persistence of consumer savings on the timescale described, DECC’s social researchers could commission research to better understand how behaviour change could be achieved using smart meters – and what issues might arise in the process.

Between July 2009 and March 2011, smart metering policy development was outsourced to OFGEM (the Office of Gas and Electricity Markets). The stated

<sup>97</sup> See for instance, DECC, 2013f, p.44ff. Examples of literature cited include American Council For An Energy-Efficient Economy, 2010; Darby, 2006; Mott MacDonald, 2007.

<sup>98</sup> Government Office for Science, 2012, Annex A, p.54.

reason for this was that OFGEM was better positioned to manage the policy design stage.<sup>99</sup> It was only after the policy agenda moved back to DECC that the department considered recruiting social researchers who would commission empirical projects. DECC's officials were aware that first, approximately a third of the financial case for smart meter policies relied upon consumer benefits whose magnitude and durability were recently described as 'uncertain' by the National Audit Office (NAO),<sup>100</sup> and second, that there were international examples of public opposition towards smart meter technologies.<sup>101</sup>

In the light of these potential threats to the scheme, DECC's new SMIP prioritised the development of a consumer engagement strategy to ensure that energy consumers would get the best value for money from smart meters. To this end, DECC allocated £56m for the programme between 2011 and 2015<sup>102</sup> – including a budget for a 'behavioural change specialist'.<sup>103</sup> The SMIP's Head of Benefits and Evaluation consulted with DECC's Head of Policy Evaluation, and recruited a GSR-accredited social researcher as 'Head of Research and Evaluation' in the post allocated to the behavioural change specialist.<sup>104</sup>

While this was a promising step, by the time the Head of Research and Evaluation post was filled some key decisions had been made. It was already decided that government would mandate a *staged* roll-out of smart meters, during which suppliers could install smart meters but they would not yet be

<sup>99</sup> DECC [National Archives], 2010.

<sup>100</sup> National Audit Office, 2011, p.10.

<sup>101</sup> A social researcher in DECC (5).

<sup>102</sup> National Audit Office, 2011, p.4.

<sup>103</sup> A policy official in DECC's SMIP.

<sup>104</sup> A policy official in DECC's SMIP.

fully operational.<sup>105</sup> This was because the data communications company that would handle data services between consumers and suppliers was not expected to be in operation until autumn 2013. This two-phased approach allowed energy suppliers to start installing smart meters in homes before DECC had developed a ‘code of practice’ for installations – this was being drafted and would eventually become operational in June 2013.<sup>106</sup> Hence, although the first stage was partly justified by the promise of achieving some consumer benefits early on,<sup>107</sup> suppliers’ only obligation for the first two years of the early roll-out phase would be to offer domestic consumers an IHD.<sup>108</sup>

Indeed by the time that the first social researcher had joined the team, the first stage (or ‘foundation phase’) of domestic and non-domestic smart meter installations had already been underway since April 2011. Given the social researcher’s relatively late arrival on the scene then, this person was not well-placed to challenge the overall policy design nor the assumptions about consumer benefits made in previous economic assessments. Nonetheless, – as was the case for the Green Deal – empirical social research insights could help to tweak the implementation of the policy and maximise the value for money of the roll-out.

Over the next three years, the policy team employed two more social researchers as perceived requirements grew. The next subsection examines

<sup>105</sup> DECC, 2010c, p.36.

<sup>106</sup> DECC, 2013g, p.27.

<sup>107</sup> DECC, 2010c, p.1. The value of supplier benefits were also expected to be slightly more: £0.4bn against £0.43bn for the central estimate (p.37).

<sup>108</sup> DECC, 2011i, p.15.

efforts made by these social researchers to increase understanding of behaviour change associated with smart meters.<sup>109</sup>

### 3.2 Making Plans for Social Research: 2011-2012

The Head of Research and Evaluation was managed by the Head of Benefits and Evaluation – an experienced civil servant who previously held posts as a specialist scientist. He was identified by various interviewees as a DECC policy official who appreciates social research methods and expertise, and would work collaboratively with social researchers to define research projects.

From the start of the foundation phase, the SMIP generalists and analysts focused on policy delivery rather than design. This focus was reflected in the research projects that were commissioned, as the Head of Benefits and Evaluation explained:

“The utilities are not accountable for [consumer benefits] – whereas some of the other benefits of the programme were things that suppliers will try to deliver. So we focus mainly on the consumer benefits, and use the range of methods that you’ve read about to try and understand that and to try to identify risks or opportunities and to come up with conclusions...about what, if anything, needs to change.”<sup>110</sup>

This point concerning the perceived significance of social research for monitoring progress was reiterated by a social researcher:

“I would say there’s a real commitment to gathering and using evidence to develop our policies and evaluate them and change if necessary. And so that’s why the early learning project is great – it’s a learning project early on...to see whether anything needs to change or just to provide pointers on good practice to suppliers for mass

<sup>109</sup> The foundation phase was later extended until April 2016 – see DECC, 2015, p.9.

<sup>110</sup> A policy official in DECC’s SMIP.



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rollout. So I think the fact that that project was commissioned demonstrates commitment to generating good evidence.”<sup>111</sup>

We will examine the early learning research in the next subsection. For now, it suffices to observe that, given that i) the Head of Benefits and Evaluation valued social researchers’ contribution, ii) understanding consumers’ experiences, concerns and the realisation of benefits was a top priority for the SMIP, and iii) this was a policy area where ministers had already taken key decisions, the ensuing social research projects were not intended to provide an internal challenge function that would bring into question the policy design. Rather, the projects would be used instrumentally to monitor progress during the foundation phase and provide evidence from which actors could take decisions to ensure that the expected consumer benefits would be realised as far as possible, particularly during the mass roll-out phase. As such, the projects were intended to enable single-loop learning within the policy frame, rather than to help with developing the policy frame. This is not, however, to say that there was no need for a challenge function during the foundation phase. The remainder of this subsection situates social researchers’ influence in the context in which they operated.

As a first step towards planning an evaluation of the smart meter roll-out during the foundation phase, in summer 2011, DECC’s social researchers ran a stakeholder workshop to discuss how best to measure the benefits of the smart meter roll-out at that stage. The workshop involved representatives from seven energy suppliers, five DECC officials and seven members from academic or non-governmental institutions.

<sup>111</sup> A social researcher in DECC (8).

The workshop began with civil servants emphasising a wide range of reasons for evaluating the foundation phase – as summarised in the workshop report:

[B]ecause there are uncertainties over the best approach and the likely impacts (especially on householder behaviour); to provide feedback to improve the roll-out process; to provide early warning of risks; for suppliers to maximise the benefit to themselves, customers and UK commitments to reduce energy demand; to give the public (and the NAO [National Audit Office]) confidence that the roll-out is of value and being conducted fairly and efficiently by Government and the supply industry (thus maintaining credibility of the Smart Meter Programme); and because there is a commitment to do it.<sup>112</sup>

The first reasons could be deemed instrumental (such as helping to decide the best approach, and to improve the scheme's implementation), while the latter were clearly symbolic (e.g. to secure credibility and to stay true to commitments). In this way, the quotation captures a range of perspectives on the value of social research which were held amongst research and policy officials within DECC.

Clearly, then, officials felt that a lot hinged on comprehensively monitoring the effectiveness of the foundation phase for the realisation of supplier, consumer and society-wide benefits. But their commitments were found to conflict with energy suppliers' priorities, which were to ensure that they achieved a set number of successful installations, with minimal complications, satisfied consumers, and commercially sensitive information about their processes protected.<sup>113</sup>

Some representatives from the energy suppliers used the workshop to state a range of concerns about conducting what social researchers considered a

<sup>112</sup> AECOM, 2011a, p.6.

<sup>113</sup> AECOM, 2011a, p.2.

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valid and robust evaluation of the foundation phase. They questioned the necessity of using RCTs to evaluate the foundation phase of the domestic roll-out by comparing the benefits realised by an intervention sample against a control sample.<sup>114</sup> They argued that it would be practically difficult for energy suppliers to design their roll-out strategy so as to make it amenable for the construction of randomised samples. In addition to this, it was claimed that the validity of any trial-based evaluation would be compromised by the likely self-selection of customers who are already sufficiently engaged and interested in smart meters enough to request one from their supplier. These issues were confounded by suppliers’ concerns about the commercial sensitivity of publishing any data that DECC planned to collect. Such data could reveal information about the business’s roll-out strategy, or bring negative attention to the company’s practices. Imagine, for instance, the reputational damage that could be caused if an energy supplier’s installation team were consistently found to be misrepresenting the nature of the meter upgrade to consumers, or otherwise not making sufficient efforts to enable their customers to maximise their use of a smart meter.

On top of this, suppliers also reminded the civil servants that they had “no obligations” during the foundation phase, and proposed that policy-makers focus on separate behavioural trials (such as those carried out by the DECC-funded Energy Demand Reduction research project),<sup>115</sup> “rather than trying to shape suppliers’ roll-out activities to provide comparable situations for evaluation, treating them as experiments”.<sup>116</sup>

<sup>114</sup> AECOM, 2011a, pp.18-19.

<sup>115</sup> AECOM, 2011b.

<sup>116</sup> AECOM, 2011a, p.23.

Suppliers' commercial interests thus threatened to derail an evaluation of the smart meters' roll-out at the earliest stage. But the social researchers were persistent with their challenge and a negotiated agreement was reached, so that civil servants would draft a specification to identify what sort of evidence would be satisfactory to convince them that the suppliers were achieving and recording the desired impacts. Energy suppliers would then share their progress with the civil servants on a confidential basis.

While the industry representatives' challenges to a thorough foundation phase evaluation were not necessarily insurmountable, (trials might be designed to work with the grain of suppliers' installation plans, self-selection could be accounted for and sensitive data could be protected), the civil servants were careful to maintain a strong rapport with the companies. Reflecting on this relationship with energy suppliers, a policy official explained:

"I think it's true to say that in any relationship between government and industry, the element of trust is very important. So they trust us, you know with data for example that we're not allowed to publish – so like individual performance, for example. So if we get information from them under License Conditions then we are restricted in publishing that, we have to publish as an aggregate level. But we rely on them to give us that data, and to protect it. – You know, we rely on them to answer data requests in a timely way, and to give us the data that we need, and they generally cooperate with that. So it's partly about having a trusted working relationship which you build up over time."<sup>117</sup>

Consequently, a thorough process evaluation of all suppliers' progress and the realisation of promised benefits was ruled out. The resulting evaluation would be less comprehensive.

<sup>117</sup> A policy official in DECC's SMIP.

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In the months after the workshop, the Head of Research and Evaluation commissioned two empirical research projects to help the team to understand any citizen concerns about smart meters. The first project investigated customer “awareness, understanding and attitudes”<sup>118</sup> with regards to smart meters and IHDs in homes where they have already been installed. Through focus groups and interviews which were run in February 2012, the study found that people who had a smart meter installed reported a positive experience with the device, with many claiming (when asked) that it led them to consider adopting specific energy-saving measures. Probably due to the concerns raised by energy suppliers, this study neither reported on whether households had reduced their energy consumption nor investigated consumers’ perceptions of the installation process – which would have perhaps been more useful for understanding whether the benefits of smart meters were being realised at this early stage.

The second piece of empirical social research involved a series of four surveys to track public opinion around smart meters. The policy team were concerned that smart meters had faced opposition in other countries, where some citizens claimed that smart meters can be detrimental to brain development or can be used to snoop on members of the public:

“I think it was Australia, basically [smart meters policy development] fell at customer reaction to it and there was all these rumours that it was leaking your brain and people were spying on you and there was this really bad public reaction to it. And the policy team are very, very aware of the potential for things to go wrong because of adverse public reaction. So it was something they were - just very aware of. And so we got a tracker going on just keeping an eye on attitudes and where things are happening, and just trying to make sure we catch things before they start.”<sup>119</sup>

<sup>118</sup> DECC, 2012g, p.4.

<sup>119</sup> DECC’s HPE.

The fieldwork surveys were run in April 2012, October 2012, April/May 2013 and September/October 2014.<sup>120</sup> The studies did not reveal “any big concerns”<sup>121</sup> for the policy team, and while they reported high ‘awareness’ of smart meters, it was inferred that “understanding” smart meters was rather stable at about 5%. As such, they were not used to instrumentally inform any decisions, and if they were used at all, it would have been for symbolic purposes to substantiate current activity.<sup>122</sup>

Meanwhile in April 2012 the SMIP opened a public consultation, inviting input on their consumer engagement strategy and monitoring plans.<sup>123</sup> As a social researcher recalled, the energy company representatives were not the only stakeholders who were reluctant about monitoring benefits realisation at this stage:

“When you do stuff early, there’s always a risk that people will draw conclusions that things aren’t working. Well the point is that we wouldn’t expect them to because the full functionality isn’t yet in place. And actually we’re in this foundation phase as a programme where suppliers are testing their approaches in order that it works out really well at mass rollout. So there are risks to doing research early on in the programme from a policy, you know, if you’ve got risk-averse policy people then it can seem quite risky doing evaluation quite early on.”<sup>124</sup>

Nonetheless, in its response to the consultation in December 2012, DECC declared that the remaining period of the foundation phase would be treated as a time of intensive learning:

<sup>120</sup> Findings are summarised in: Ipsos Mori, 2013; 2014.

<sup>121</sup> A social researcher in DECC (8).

<sup>122</sup> Boswell, 2009, p.62.

<sup>123</sup> DECC, 2012h, p.32.

<sup>124</sup> A social researcher in DECC (8).

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This will include gathering early insights into consumer benefits and how they may differ by consumer type; measuring awareness and attitudes towards smart meters; and learning more about what works in changing energy consumer behaviours.<sup>125</sup>

The next subsection focuses on the ‘early learning’ project (ELP), exploring what exactly was learnt and how lessons have been taken forward.

### 3.3 ‘Early Learning’ From the Foundation Phase: 2012-2014

By the time the ELP studies were announced, nearly a million smart meters had already been installed across the UK.<sup>126</sup> Two energy suppliers complied with officials’ requests by allowing researchers to collect anonymised quantitative and qualitative data from their customers, which the Government was permitted to publish at aggregate-level.<sup>127</sup> In addition to this, other suppliers provided annual updates to civil servants on a confidential basis, as agreed following the evaluation workshop in 2011.

The ELP consisted of a range of research studies conducted between 2013 and 2014 – including a consumer survey and qualitative study on owners’ and non-owners’ attitudes to smart meters,<sup>128</sup> an exploration of prepayment customers’ attitudes and experiences,<sup>129</sup> a quantitative analysis of domestic customers’ energy use data,<sup>130</sup> a behavioural trial exploring alternative approaches to information campaigns (without using smart meters),<sup>131</sup> and a literature review of existing studies.<sup>132</sup> An additional qualitative study was

<sup>125</sup> DECC, 2012i, p.5.

<sup>126</sup> DECC, 2012j, p.15.

<sup>127</sup> DECC, 2015c, p.13.

<sup>128</sup> DECC, 2015c, p.13.

<sup>129</sup> DECC, 2015d.

<sup>130</sup> DECC, 2015e.

<sup>131</sup> DECC, 2015f.

<sup>132</sup> DECC, 2015g.

conducted at the same time to understand SME customers' experiences with smart meters.<sup>133</sup>

Despite a commitment to finding out 'what works' in the realisation of consumer benefits, the project reports were heavily caveated and not to be generalised – especially in terms of implications for benefits realisation during the mass roll-out phase.<sup>134</sup> A range of reasons were given for this: it was acknowledged that the foundation phase had fewer requirements on the installers than would be in place in the mass roll-out, only a small data sample was available (from one or maximum two suppliers in particular) and third, much of the infrastructure that would enable benefits to be realised was not in place yet.

A wide range of areas were covered in the commissioned research, so the remainder of this subsection focuses on two particular kinds of insights from these projects: insights about domestic consumers' engagement with smart meters in general (and also vulnerable domestic customers specifically), and insights about how smart meters have been installed and used in SMEs. Left out of this analysis are the behavioural trials on what kind of information best enables behaviour change (which did not involve smart meters), and the synthesis review by Sarah Darby.

### *Early learning about domestic consumers*

Quantitative and qualitative studies were commissioned to understand households' awareness and interaction with smart meters. The quantitative data study compared energy use amongst smart meter owners against comparable households without smart meters, using three years' worth of

<sup>133</sup> DECC, 2013h.

<sup>134</sup> DECC, 2015i, p.8.



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meter data.<sup>135</sup> It found that households with smart meters used 2.3% less electricity (with 95% confidence intervals between 1.6-2.8%) and 1.5% less gas (with 95% confidence intervals between 0.9-2.1%). These values are broadly consistent with expected savings as outlined in the impact assessments, assuming they are reproduced persistently for 18 years.<sup>136</sup> Despite the questionable assumption that individual households' energy use would not change substantially over eighteen years, these studies were seen as substantiating the expectations of the policy team, and so no changes were deemed necessary in the light of them.

By contrast, the qualitative analysis revealed two important insights which suggested changes to help improve the customer experience and maximise benefits in the future roll-out.<sup>137</sup> First, the study revealed two distinct types of user interactions with the IHDs. One group of users adopted an 'information approach', which typically involved occasionally (and sporadically) looking at the display to see how much energy was being used at a given time. Others took a 'monitoring approach', where they would use the IHD regularly – for example, in order to check if appliances were switched off before going to sleep. The latter group of users were more likely to continue using their appliance after a few weeks of the smart meter installation, from

<sup>135</sup> DECC, 2015e, pp.11-13. All customers in the study used a credit system – none had a prepayment meter.

<sup>136</sup> DECC, 2015e, p.19. Some data were removed based on what 'normal' household conditions should look like. For instance, households with consumption at the extreme ends were removed from the study. Households in which annual energy consumption doubled or halved between the two years were also excluded from the study “as these changes were deemed to be due to factors outside of the smart meter intervention”. Yet, it is unclear whether it is reasonable to expect households' energy consumption to remain consistent in this way over the timescale projected, as a household can undergo significant change over 18 years.

<sup>137</sup> DECC, 2015c, p.58.

which the analysts argued that the monitoring approach should be emphasised in future installations.<sup>138</sup>

Second, the study found that despite broadly being satisfied with the installation,<sup>139</sup> some consumers did not use any information they might have received from the installer to help them change their energy consumption. Many claimed that they did not find the information helpful – citing reasons such as being uninterested in making changes, a ‘lack of meaning’ associated with the information provided, no appliance-specific feedback, and the absence of any apparent solutions provided to the ‘problem’ presented by the display.<sup>140</sup>

Qualitative research also identified ‘more vulnerable groups’ (i.e. those on lower income, older than 65 or otherwise disadvantaged) as more likely to find the IHD difficult to use, and, consequently, to have it unplugged.<sup>141</sup> As such, they were least likely to benefit from the installation of a smart meter, which highlighted the need for extra effort to be taken for these customers.

All of these qualitative insights revealed the diversity of user practices with respect to smart meters, and challenged technological determinist assumptions that supposed users would all respond in the same, predictable way to receiving in-home displays. Consistent with the STS literature, they emphasise that policy-makers should expect variation in users’ engagement with new technologies.<sup>142</sup>

<sup>138</sup> DECC, 2015c, p.131.

<sup>139</sup> DECC, 2015c, p.21.

<sup>140</sup> DECC, 2015c, p.57.

<sup>141</sup> DECC, 2015c, p.132; DECC, 2015d, p.12.

<sup>142</sup> Oudshoorn et al., 2004, p.44.

### *Early learning about SMEs*

Qualitative fieldwork was also conducted with small and medium-sized enterprises who had received smart meters by one particular (unnamed) supplier, just prior to the codes of practice coming into force.<sup>143</sup> The aim of this study was to explore consumers’ “awareness, understanding, experiences of and attitudes towards smart energy meters and smart energy products and services”.<sup>144</sup> The report was as heavily caveated as the others were. Furthermore, the study could not report on how those with smart meters were using real-time consumption data supplied from the meters, because the contractors were unable to speak to any SMEs who had access to that data.<sup>145</sup> The study was nonetheless flagged by one social researcher as important for highlighting the usefulness of qualitative methods.<sup>146</sup> It produced the insight that regardless of whether they already had a smart meter installed or not, SME customers were typically unaware of how they could benefit from using a smart meter.<sup>147</sup> Indeed, the researchers found that on all occasions where the supplier proposed that customers get a smart meter, the installation was presented as a routine meter upgrade, rather than as a positive change to benefit the consumer.<sup>148</sup>

The study therefore brought attention to significant barriers that could prevent full consumer benefits from being achieved. The authors recommended that the policy team consider how SMEs could be better made aware of the potential benefits of smart meters.<sup>149</sup> DECC subsequently

<sup>143</sup> DECC, 2013h, p.2.

<sup>144</sup> DECC, 2013h, p.2.

<sup>145</sup> DECC, 2013h, p.2.

<sup>146</sup> According to one social researcher (8).

<sup>147</sup> DECC, 2013h, p.5.

<sup>148</sup> DECC, 2013h, p.45.

<sup>149</sup> DECC, 2013h, p.47.

commissioned the Carbon Trust in 2014 to identify innovative products and services that could be developed to enable SMEs to make the most out of their smart meters.<sup>150</sup>

### *Implications for next steps*

The implications of the empirical projects discussed in the previous section, along with an additional literature review by Sarah Darby,<sup>151</sup> were summarised in a ‘policy conclusions’ report which outlined steps for further action.<sup>152</sup> Significantly, the latter report reiterated that energy suppliers must ensure that they are addressing the information needs of all customers – emphasising that households should be shown how to use the IHD at the time of installation. The policy conclusions report also emphasised that installers should encourage households to adopt a ‘monitoring approach’ to using their IHD.<sup>153</sup>

The results of these findings were then used to convince the policy team to commission an action research project. This project, which is being carried out at the time of writing, will help officials to decide what constitutes good practice in the provision of energy efficiency advice, from which they will update guidance materials for installers.

The research commissioned between 2011 and 2014 was reported to have been well-regarded amongst evidence communities within DECC, as one civil servant emphasised:

<sup>150</sup> DECC, 2014e, pp.21-22; DECC, 2015h.

<sup>151</sup> DECC, 2015g.

<sup>152</sup> DECC, 2015h.

<sup>153</sup> DECC, 2015h, p. 45.

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“So I think generally within the department, we’re seen as a best-practice example of using research evidence to inform policy.”<sup>154</sup>

Indeed the policy team has since won an internal award for its use of research during this time.

It is clear then that while the projects did not provide a deep challenge to the dominant policy framing, they did identify areas where the roll-out seemed to be going well and areas that could be improved. The social research thereby enabled the policy team to hold the energy suppliers to account, by revealing – through the reported experience and perspectives of members of the public – unsatisfactory installation procedures (for example, some installers not engaging sufficiently effectively with consumers, or describing the smart meter installation as a routine upgrade) or other unforeseen issues (for instance, the two distinct ways in which the IHD was used – to provide information or to ‘monitor’). The policy team could then take action to ensure that issues would be better addressed in the mass roll-out stage. If the Government remains committed to monitoring the mass roll-out ‘live’ during phase two, rather than an evaluation after-the-event,<sup>155</sup> then they have a stronger chance of ensuring that smart meters are cost-effective for consumers and are used to significantly reduce (rather than to increase) carbon emissions.

This portfolio of research was intended to enable single-loop learning so that officials can help to ensure the consumers benefit from the smart meter roll-out as much as possible. And indeed this was its major contribution, enabling quick changes to be made where required. But while the research does not appear to have scope to enable a reframing of the policy problem,

<sup>154</sup> A policy official in DECC’s SMIP.

<sup>155</sup> Although according to one interviewee, an after-the-event evaluation is more probable.

there is some evidence to suggest it achieved a conceptual rethink of the smart meter roll-out, by emphasising that smart meters will be domesticated differently in different households (or companies), with varying effects on energy consumption.<sup>156</sup> It is not clear if this was a particularly new insight for the SMIP, but it is consistent with DECC's experience of social research projects associated with the implementation phase of the Green Deal. Together these may have alerted other teams within DECC – and the ministerial leadership – of the need to 'think people' more during the policy design stage, and to be cautious of technological determinism.

### 3.4 Conclusions on Smart Meters

Through the use of social research then, and in a context of a high degree of scrutiny (from the NAO in particular), civil servants' conception of the domestication of smart meters gradually shifted from a vision of information changing all users' behaviour, to a more nuanced consideration of how behaviour change could be achieved.

In this process, social researchers have played an important role in challenging energy suppliers to comply with an evaluation, as well as questioning assumptions about users' engagement with the devices through empirical research. In particular, it emerges that there is likely to be more variation amongst citizens in their engagement with smart meters than previously expected. While officials now acknowledge the likely variability amongst citizens, and some steps will be taken to update guidelines for installers, it remains to be seen whether these will be sufficient to ensure that consumer benefits are fairly distributed across society.

<sup>156</sup> DECC, 2015h, p.7.

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There also remains uncertainty over whether the public will really benefit to the tune of £6.3bn,<sup>157</sup> and if those benefits will last for the full 18 years that would make the business case worthwhile. But it does not follow that DECC should give up on trying to maximise consumer benefits, nor that the smart meters implementation programme should be dissolved or that smart meters be banned. Smart meters do have the potential to bring a range of benefits for energy suppliers and for consumers too, and can possibly contribute towards achieving a slight reduction in carbon emissions. Cutting the smart meters implementation programme would likely see citizens paying for smart meters via bills without seeing any benefits. This all suggests that it remains in the public interest for government engagement in the smart meter roll-out – funding research and exercising legislative power to hold suppliers to account. And given that the programme is managed by a policy team that has gained a reputation for its use of social research evidence, as more installations are completed and a fuller picture emerges, we can expect that social research will continue to play a prominent role in identifying issues. Perhaps it will also be used as the basis for more innovative ideas to engage different audiences with social research.

<sup>157</sup> DECC, 2013f, p.1.

## 4. Heat Strategy

### 4.1 Background

In December 2011, The Coalition Government published *The Carbon Plan*, which set out the Government's ambition for achieving reductions in carbon emissions in line with the fourth carbon budget (for the period 2023-27) and for increasing the UK's energy security.<sup>158</sup> In the next few months, a Heat Strategy and Policy team would consult the public ahead of producing a strategy report that would subsequently provide a framing for policy proposals.<sup>159</sup> In developing the evidence base for this, the team sought to understand variation in current domestic heat use in greater depth. This provided an opportunity for the CIT to engage with policy development early in the policy design stage. As we saw in Chapter 5, by this time, the CIT had built a strong reputation with policy colleagues – particularly within the Energy Efficiency Deployment Office – and was also expanding in size (with an emphasis on recruiting GSR-accredited social researchers) which would provide some capacity for longer-term projects than were possible hitherto.

This section explores how the CIT worked directly with the Heat Strategy and Policy team to develop their understanding of how energy is used in UK homes. As will become clear, researchers' challenge to colleagues' assumptions about people were more influential in terms of inspiring a rethink of the policy framing than was possible for the Green Deal or the SMIP.

<sup>158</sup> DECC, 2011b, p.13.

<sup>159</sup> DECC, 2012k, p.93.



## 4.2 Commissioning Social Research

After the publication of *The Carbon Plan*, and around the same time that DECC was consulting on its heat strategy in 2012, economists and statisticians in the Energy Efficiency Development Office were surprised to find that the highest 10% of domestic gas consuming households in the UK use quadruple the amount of gas annually than the lowest 10%.<sup>160</sup> Moreover, the independent variables that were expected to be most significant in their quantitative model (such as the size of the property, how many rooms it had, and socioeconomic information about the occupants) could only account for 40% of the variation in gas consumption amongst households.<sup>161</sup>

When considering the quantitative data, the CIT suggested to their heat strategy colleagues that they should commission a qualitative research project to better understand the remaining variation in gas consumption. The social researchers then put together a brief for tendering the research project, translating the needs of the policy team into an outline for what was required empirically. Through working closely with the social researchers, the generalists gained an appreciation of how qualitative insights could usefully shed light on the matter.

The winning contract planned a thorough study that compared 30 high-consuming households with 30 low-consuming households residing in physically similar buildings, using multiple interviews and temperature monitoring.<sup>162</sup> One researcher recalled that since qualitative approaches were

<sup>160</sup> DECC, 2013i, p.22.

<sup>161</sup> See DECC, 2012l, Table 1: p.5. The socioeconomic factors included age, tenure and household income.

<sup>162</sup> Brook Lyndhurst, 2012.

a new approach for their policy colleagues, who held concerns over the representativeness and robustness of the data, there was a sense that a particularly big sample should be used:

“I think in industry or in other domains, maybe, you could have done something similar with half the budget and actually you would have found out something fairly similar. And then you might not have been quite so confident. So I think there definitely was an increase in budget, to get people a bit more comfortable that it would be qualitative.”<sup>163</sup>

With this rather symbolic gesture to secure legitimacy in the eyes of the generalists, the research project achieved buy-in from the Heat Strategy and Policy team from the start. Subsequently in November 2012 the researchers reported that, contra to many expectations, the variation in domestic gas consumption could not be explained straightforwardly in terms of different attitudes. The same researcher recalled:

“And actually going into it there was a view, permeated through a lot of different places (such as the media, think tanks, academia), that there were some households that were very high consumers of gas, or in fact of energy – I think initially it was high-energy consuming households – that they were high energy consuming households, for some reason that you could point to. That there was something about *that* household that maybe they didn’t care about the planet, or they were just – that they didn’t care about anything, really. They just wanted to max- that it was something to do with ‘let’s live fast, die young’, or...that there was something to do with the household, which sort of, you could pin-point. And once you pinpointed that then maybe you could target that group, and focus on that group, and as with the kind of standard MINDSPACE – and marketing-type – approach you would be able to segment the market and then tackle the issue. That was the thinking going into it.”<sup>164</sup>

<sup>163</sup> A DECC social researcher (1).

<sup>164</sup> A DECC social researcher (1).

### *“Challenge and Be Challenged”*

The results of the research project instead pointed out that the variation was largely due to a relatively mundane combination of factors, as explained in the research report:

However, it did not appear that High and Low gas users had particular behaviours that made them easy to identify as High or Low. Instead, each high or low gas user tends to have a cluster of very ordinary behaviours that happen to culminate in high or low gas use. There are, it seems, many different ways to be a high or low gas user.<sup>165</sup>

The difficulty was to put this insight into practice.

### 4.3 Strategizing with Social Research Insights

The ‘High-Low’ research project moved the Heat Strategy and Policy team to rethink their understanding of gas consumption, although they concluded that they would need more time to grapple with its policy implications. The immediate, short-term impact of the research on the strategy team, then, was not to take the Government’s domestic heat strategy in a new direction, but to drop plans to segment and engage the public in terms of high or low users of energy. Since the social researchers were engaged early in the policy development stage, and prior to any ministerial commitments being made on heat strategy, the research-based challenge to officials’ assumptions could straightforwardly be used to stop further development within the given policy framing. Furthermore, the study and interactions with the CIT that followed prompted the officials to demand more social science insights into

<sup>165</sup> Brook Lyndhurst, 2012, p.3.

energy use in the home. DECC subsequently funded two long-term research projects on domestic energy consumption.<sup>166</sup>

The significance of the High-Low research project was highlighted in DECC's 2013 Heat Strategy, *The Future of Heat: Meeting the Challenge*.<sup>167</sup> Yet, the challenge of improving domestic energy efficiency was described in terms of consumers' lack of information and/or economic incentives, or market uncertainty over standards and regulations.<sup>168</sup> Arguably, this was a missed opportunity for the full range of possibilities from social practice theory to be explicitly explored in the report.

While the research has not yet inspired a new policy framing for domestic heat to emerge, there is some evidence of conceptual learning from the research projects within DECC. The analysis reportedly attracted attention from across DECC – including from the Chief Scientist – and stimulated conversations within the department about the complexity of reducing energy use in UK households.<sup>169</sup> By highlighting how embedded energy use is in mundane domestic practices, interest grew in gaining insights from recent academic research using social practice theory. By this point in late 2012, many of DECC's civil servants had already been exposed to ideas from social practice theory (not least because of the work of the Head of Science, Head of Social Science, the ESRC Research Fellow and the HCI as we saw in Chapter 5), but there still remained an open question of how those insights could be translated into policy-making processes. As such, a new and reframed policy design has yet to emerge. But it is too soon to class this

<sup>166</sup>One of which began in 2012, and the other in 2014. See Energy Technologies Institute, 2014; UCL Energy Institute, 2015.

<sup>167</sup> DECC, 2013j, p.76.

<sup>168</sup> DECC, 2013j, p.79ff.

<sup>169</sup> A DECC Social Researcher (1).

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research as a dog that didn’t bark<sup>170</sup> - it may be that the research insights are dormant seeds,<sup>171</sup> which will be picked up again at a future point in favourable circumstances.

This research project is thus a good example where early – and close – engagement with social researchers in the policy process enabled research insights to inform strategic decisions about decarbonising heat demand. Rather than focusing on particular types of households that could be identified as ‘high energy consumers’, which is how the policy team expected to use research insights, the research project revealed that gas consumption is more complicated than that, and emphasised the significance of households’ mundane routines. For this reason, the research was valued for its conceptual contribution. It now remains to be seen whether – and how - insights from the High-Low study and the commissioned research projects will contribute to new domestic heat policy ideas in the Conservative Government.

#### 4.4 Conclusions on Heat Strategy

Domestic heat policy provided an opportunity for social researchers to contribute to policy design within DECC. Through early engagement with the now-expanded CIT, social research was commissioned that would challenge the dominant engineering and economic framing of domestic energy use. Yet, despite provoking a shift in discourse from individual attitudes or choices towards understanding the configuration and reinforcement of domestic routines which feed into high or low energy use in

<sup>170</sup> Owens, 2015, p.138.

<sup>171</sup> Owens, 2015, p.132.

the home, the dialogues within the department were never translated into firm policy ideas by the Coalition Government. The Conservative Government's heat policy priorities are unclear at the time of writing, with firm commitments made to permit shale gas extraction<sup>172</sup> at the same time as announcing the revoking of policy for domestic buildings built after 2016 to emit zero carbon emissions, and a "review" of energy efficiency policies.<sup>173</sup>

### **5. Social Researchers' Influence in Energy Efficiency and Demand Reduction: Towards 'People Thinking'?**

After having seen in Chapter 5 that the Head of Customer Insight and Head of Policy Evaluation shared an ambition to get civil servants to 'think people' more, this chapter revealed that to a small degree, this has been achieved in energy efficiency and demand reduction policy areas. At a time of increased scrutiny of departmental spending, in relatively favourable conditions given the circumstances – including the presence of external pressure from committees, the National Audit Office, journalists, and academics – social researchers have gradually been able to provide research-based challenge to key assumptions in the Green Deal, smart meters implementation, and domestic heat policy areas. In these cases, research was used instrumentally, for instance to question the expectation that particular schemes may have universal appeal across UK society, to highlight the variable nature of users' engagement with technologies, and to emphasise the complexity of behaviour change. In this regard, DECC's social researchers have achieved considerable direct influence in a relatively short space of time.

<sup>172</sup> HM Treasury, 2015, p.10.

<sup>173</sup> HM Treasury, 2015, p.46.

Yet, in contrast to what we saw in DEFRA, in neither of these cases have the research projects been used as a basis for the development and implementation of more reflexive policy ideas during the years of the Coalition Government. No energy efficiency or demand reduction policy has been framed in a way which ‘starts from where people are at’. This is despite the use of similar approaches as those that DEFRA’s social researchers employed – such as segmentation models, and experimental (or trial) methods to test the effectiveness of policy ideas. This emphasises the point that when considering the epistemic context of the ‘scientific civil service’, we must expect diversity between departments.<sup>174</sup>

Moreover, it shows that the same policy tools can be used to enable either single- or double-loop learning, depending on the circumstances in which they are developed and applied. Although we have also seen evidence to suggest that the research projects considered in this chapter have stimulated some conceptual learning, and therefore in time we may conclude that they functioned as dormant seeds,<sup>175</sup> springing to life under favourable conditions.

The next chapter completes the empirical analysis with comparisons between the histories of social research in DEFRA and DECC, before I draw overall conclusions to the thesis.

<sup>174</sup> C.f. Webster 2007a; Wynne 2007.

<sup>175</sup> Owens, 2015, p.132.

## **Chapter 8**

# **Analytical Comparisons and Conclusions**

### **1. Introduction**

**T**HIS CHAPTER compares the social research functions in DEFRA and DECC, and then draws broader conclusions to the thesis. We start with an empirically-based comparison of analytical structures in the two departments – drawing heavily on data in Chapters 4 & 5 as well as some novel data. Section 3 then considers similarities and differences between DEFRA and DECC's applications of social research expertise in behaviour change for reducing the public's environmental impact and energy use. Sections 4 & 5 comprise the conclusions to the chapter and to the thesis, with a return to the research questions before a consideration of the limitations to this project and associated implications for further research.



## **2. Comparisons: Social Research Capacity in DEFRA and DECC**

Social research capacity in both DEFRA and DECC has grown substantially over their short histories. Indeed one interviewee reflected that the growth of social research capacity arguably followed similar trajectories across the two organisations. Each department started with a base of zero social researchers. They each underwent a period of expansion, when social researchers and their allies negotiated for greater resources, broadened civil servants' conceptions of what social research could mean for their department, created new roles, and increasingly gained legitimacy and appreciation for social research in the department. At the time of the interviews, when posts were at risk in both departments due to budget cuts, the number of researchers settled at around 15 and 20 in each department.

A second striking similarity is that in both departments the initial growth in social research capacity was driven by a motley set of actors who were motivated to establish a social research tradition for (differing) instrumental reasons. In DEFRA, this started with the first Secretary of State, Margaret Beckett. She wanted her department to draw a line under the past and all of the controversies associated with the Ministry of Agriculture, Fisheries and Food by adopting new processes and producing new outcomes. In a political climate in which Government Ministers valued the potential contribution of social research evidence for improving outcomes, Margaret Beckett expressed a commitment to utilising social research. This commitment was shared by the department's new Chief Scientist and his Science Directorate. Over the next few years, they pursued steps to develop a social research capacity by exploring new meanings of social research, working with policy

officials and the Chief Economist to identify new roles, and supporting the creation of research posts. During these early years the rural researcher on the Science Advisory Council, who was driven by a concern to contest a dominant agricultural economics framing, also played a prominent role in the collective construction of interpretations of the social dimensions of the department's remit – regarding, for instance, animal health and welfare issues.

Likewise, the initial momentum for building social research capacity in DECC emerged from an assorted mix of actors, each with their own instrumental motivations. At first DECC's political leadership did not express the same commitment as Margaret Beckett did in the early years of DEFRA. DECC's remit was defined narrowly along engineering and economic lines. It was only after concerns were raised by the Head of Science and social researchers in DEFRA and elsewhere – who all believed that DECC simply could not achieve its targets without social research capacity (particularly in the form of behavioural research) – that the issue was acknowledged. The Chief Economist also played an important role in supporting the case for building social research capacity, by funding the creation of a social research post to provide expertise on policy evaluation. While not all officials in DEFRA and DECC sang social researchers' praises during these early years, those diverse actors who drove the expansion of the department's social research capacity were clearly pursuing instrumental (rather than symbolic) goals. It is hard to imagine how social research capacity would have emerged if it were not for the support of authoritative internal and external natural scientists, economists and senior civil servants pursuing instrumental motivations.

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Moreover, around 2009/2010 – after the number of social researchers had grown considerably in both departments – the researchers then gained a greater degree of autonomy, hence they could make more significant contributions towards building their own research capacity. DEFRA’s social researchers exercised this autonomy by forming a (short-lived) Centre of Expertise on Influencing Behaviour, securing firm commitments for expansion in the 2010 Evidence Investment Strategy, and using the clout of the new Head of Profession to create new embedded research posts in policy teams with little prior engagement with social research. Similarly, in DECC the Head of Customer Insight (HCI) and the Head of Policy Evaluation (HPE) created new roles for researchers and expanded their reach across the department by bringing in seconded researchers, collaborating with the Cabinet Office’s Behavioural Insight Team, working with the Head of Science to create a Head of Social Science Engagement post, creating the joint DEFRA-DECC Social Science Expert Panel, and actively seeking out opportunities to engage policy teams across the department. In this way and with favourable institutional support from senior staff, social researchers in both DEFRA and DECC have brought epistemic diversity to new policy teams – including in the flooding and biodiversity teams in DEFRA, and the energy generation and infrastructure teams in DECC.

In examining the processes by which social research capacity expanded in DEFRA and DECC, we saw that social researchers and others often used evidence-based challenge to promote new meanings, new roles and the value of social research in DEFRA and DECC. In DEFRA, outsiders were particularly prominent in providing a challenge function – the rural researcher and the other social scientist challenged ministers, the Science Directorate, policy officials and economists. They thereby encouraged policy-

makers to reframe problems (e.g. broadening the remit to include 'rural affairs'), to identify opportunities for social research to contribute via the Evidence Investment Strategy, and to find reasons to value the input of social researchers. Later, the first social researcher in the sustainable consumption and production (SCP) team – who had come from academia and was well equipped with expert knowledge which she could refer to in making her challenges – was particularly effective at getting colleagues in the team and elsewhere to see value in engaging with social research in technical policy areas early in the policy-making process. Providing a challenge function was not just a hobby for outsiders – all analysts, and particularly social researchers, were committed to providing challenge. The new Head of Profession, for instance, successfully challenged policy teams to create new embedded research posts at a time of declining resources, and the researchers in those new posts challenged colleagues to rethink how they understood the role of citizens.

In the same way, DECC's analysts – particularly the Head of Science – challenged senior officials to see value in social research expertise. As capacity expanded, the HCI and HPE were able to challenge policy framings in a way that would open up opportunities for social research to contribute. They did this directly through their involvement on the Research Development Committee. They also brought in additional resources to aid capacity to provide a strong challenge function – particularly in the form of the Social Science Expert Panel and the Head of Social Science Engagement, who worked together to challenge scientists and engineers' conceptions of the role of social science in the energy infrastructure teams in DECC. Actors' provision of challenge thus emerges as a key mechanism by which new meanings, roles, and value for social research come to gain recognition.

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Challenge thereby helps to make DEFRA and DECC epistemically dynamic institutions, such that ideas, assumptions, and understandings are constantly changing.

Moreover, we have seen that in both departments many officials conceived of technical policy areas as beyond the reach of social research. From their perspective, social science would appear to constitute the ‘missing masses’ of science policy, as discussed in the introduction to this thesis. In DEFRA, many officials saw social science as irrelevant for tackling animal health and welfare issues, and also for SCP policy areas. But after many years of challenge and social research’s contribution being proven to officials in those areas, they could be described by the Head of Profession as having a more ‘natural’ understanding of the need for social research than in other policy areas. The same is true of DECC: the department’s original framing in engineering and economic terms provided little inspiration in terms of roles for social research. Yet, over time it came to be appreciated that social researchers have important contributions to make across the department’s remit – not only in helping to promote energy saving behaviours, but also in, for example, the siting of nuclear waste storage or the understanding of citizens’ opposition to wind turbines. Both departments have come a long way in promoting epistemic diversity within policy areas and acknowledging the multiple forms of social research that are relevant across environment, food, and energy policy domains. However, more can be done to achieve greater interdisciplinarity in these teams in the future – starting with early and sustained engagement with social researchers.

Another similarity in DEFRA and DECC’s changes in social research capacity is that officials in each organisation reported on multiple occasions that the social research profession remains at the bottom of the epistemic

hierarchy. Whether this is measured in terms of budgets,<sup>1</sup> number of analysts,<sup>2</sup> or the ‘privileging’<sup>3</sup> of some sorts of evidence over others in the policy process, researchers in both DEFRA and DECC observed this epistemic hierarchy. The social research communities in DEFRA and DECC do now have experience and skills in growing their authority and resources and can continue to make arguments for expansion – or at least a reduction in line with other analytical professions. However, it remains difficult to secure senior posts, and researchers in both departments have expressed concerns, noting that it is tempting to achieve career progression by leaving the Government Social Research Service (GSR).

This issue was particularly pertinent within DEFRA’s community – perhaps because a longer record of employing social researchers has meant there are many who have had to consider their next steps for career progression. Researchers noted that a significant number of their GSR-accredited staff now work in posts for which you do not need GSR accreditation. Some of these researchers are based in strategic evidence roles, while others have moved to a generalist role within the same team that they previously worked for as specialists. Increasingly the Head of Profession has been taking on a generalist’s portfolio of work alongside her role as the Head of Social Research in DEFRA.<sup>4</sup> A different researcher reflected that, in his next move he will probably leave social research, adding that he has been advised to do so:

<sup>1</sup> As described by a social researcher in DECC (5).

<sup>2</sup> As described by a social researcher in DECC (5) and a social researcher in DEFRA (1).

<sup>3</sup> A term used by a social researcher in DEFRA (4).

<sup>4</sup> As reported by DEFRA’s Head of Profession for Social Research.

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“I mean, I have been advised in the past, that if I wanted to stay as an analyst - that if I wanted to stay in the evidence area, that maybe I should think about transferring over to economics.”<sup>5</sup>

Reflecting on colleagues’ moves out of the social research profession, another added:

“I think one of the issues has been that there have been very few opportunities for promotion – and career progression. Particularly in a department with a small number of social researchers, like us. And therefore you need to look at other ways of broadening your skills and your development opportunities potential.”<sup>6</sup>

While the situation appears similar in DECC, past and present social researchers gave no indication that this was a concern for them. As more of DECC’s community of researchers start to seek career progression it will be intriguing to see to what extent their expertise will be retained within the department’s successor, the Department for Business, Energy and Industrial Strategy.<sup>7</sup> The epistemic hierarchy was also said to operate at a government-wide level,<sup>8</sup> and so work must also be done by the Government Social Research Service in the Cabinet Office in order to support social researchers across government departments.

For all of the similarities noted so far, there are also some key differences between the histories of social research capacity in DEFRA and in DECC. First is the context in which the two departments were formed. DEFRA was created in the aftermath of a series of controversies around the Ministry of Agriculture, Fisheries and Food, with strong ministerial commitment to work differently. This included a drive to use social research expertise, which was

<sup>5</sup> A social researcher in DEFRA (2).

<sup>6</sup> A social researcher in DEFRA (6).

<sup>7</sup> BBC News, 2016.

<sup>8</sup> As noted by two former Heads of the GSR Service.

then pursued by the scientists in the Science Directorate as part of their work on developing a strategy for science.

DECC was formed under different conditions. There was no public controversy, and no scandal. Instead it was created in a more technocratic move to overcome institutional barriers for addressing climate change by bringing together officials from different departments that were thought to need to work together more closely – a move which also resonated with Gordon Brown’s political plans to give more responsibility to Ed Miliband. In this context, and at a time of declining budgets, the department’s formation was not intended to bring a fundamental change in processes. There was no expressed commitment to engage with social science more, and indeed there was a struggle for the lack of social research capacity to be recognised as an issue during the first twelve months. But the *Capability Review* in December 2009 provided an authoritative impetus to the cause, and, with a high degree of chance, enabled social research capacity to gain a footing from which to grow over the next few years.

Despite DECC’s initial teething problems, a second (and surprising) difference is that while DEFRA has a longer history of making the case for social research to be included early in the policy process, DECC’s social researchers have reportedly been more successful at making the case for social research across the department. As one social researcher who has worked for both departments observed, it seemed like embedded researchers in policy teams in DEFRA had to work harder to make the case for the value of social research, while in her experience in DECC there was greater clarity amongst her colleagues over what her role in the team was:

“So kind of from the top, [the Head of Customer Insight] had a very good idea of what she felt we should be doing to be answering the needs of everybody else. So



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you had a much clearer steer of what was needed – and it was clearer to us because there was that much better kind of join up – it was a much more focused, smaller unit. Whereas in DEFRA, you don’t get any of that oversight from DEFRA because she works on animal health – I do a bit because I sit in her team, but if you’re in another part of the building then you don’t really have that.”<sup>9</sup>

Indeed, DECC’s HCI made an active effort to work with every policy team in the department:

“I kind of kept a tally of how many policy teams have social researchers worked with in any given year – that’s been consistently increasing over time.”<sup>10</sup>

By contrast, in DEFRA it seems that there have been a couple of cases in recent years in which a budget for a social researcher to join a policy team has been secured, with the researchers then finding that they had to make the case for what they could contribute to the team. The social researchers faced resistance – challenge even – and no doubt this was an opportunity for them to learn from. All of this does not necessarily mean that the social research capacity was better utilised in DECC than in DEFRA. We saw in Chapters 6 & 7, that there are many reasons why social research insights might not be utilised within policy development processes. However, it does show that policy officials across DECC gained some idea of what social scientists would contribute to their team – and were seemingly more prepared for them – whereas in DEFRA there remain teams that have not worked with social researchers before, and the case for social research has to be made from scratch within each team, overcoming negative perceptions or naiveties that may be held about social scientists’ expertise.

<sup>9</sup> A social researcher in DECC (2).

<sup>10</sup> DECC’s HCI.

It is also worth noting that while DEFRA and DECC both started with zero social researchers and each employed approximately 20 at the time of the interviews, DECC's capacity grew much faster than DEFRA's. Although this is perhaps more indicative of the epistemic conditions rather than the activities of key people – by the time DECC's social research capacity was expanding in 2010/11, policy-makers across Whitehall had a heightened interest in behavioural research (an area in which the Government Social Research Service had now claimed expertise)<sup>11</sup> – and this government-wide interest was in part shaped by the influential work previously produced by DEFRA's social researchers.

Despite many similarities then, DEFRA and DECC have developed distinctive social research capacities – each of which has been heavily shaped by the institutional, political, and epistemic context. We can now turn to compare social researchers' influence in DEFRA and DECC.

### **3. Comparisons: Influencing Behaviour in DEFRA and DECC**

A key similarity between social researchers' work in DEFRA and DECC is that there were many examples of instrumental uses of research (in Boswell's sense)<sup>12</sup> to improve policy in both departments. In most cases considered, there was a supportive context in which there was strong political commitment, sufficient institutional capacity, and social researchers' epistemic perspective were aligned with the dominant problem-framing, such that research projects could achieve 'direct'<sup>13</sup> impact in the short-term.

<sup>11</sup> Halpern et al., 2004; Darnton, 2008.

<sup>12</sup> Boswell, 2009, p.29.

<sup>13</sup> Owens, 2015, p.127.

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We saw this in Chapter 6 with DEFRA’s SCP team’s use of a segmentation model and qualitative research (for instance, in developing material for the Act On CO<sub>2</sub> campaign and for understanding the likely reactions to a personal carbon allowance scheme). Similarly, in Chapter 7 we saw many cases of research being used instrumentally within existing policy framings in DECC – e.g. steps were taken to make the Green Deal more appealing to citizens after research revealed features that made the scheme unpopular, and research commissioned by the SMIP team revealed that users’ engagement with the devices was more diverse than expected, prompting officials to make changes to guidelines for installers. Clearly then, under supportive conditions, insights from social research have been put to use instrumentally within policy-making processes in these two science-rich departments.

Moreover, we saw in Chapters 6 and 7 that in both departments instrumental uses of research have occasionally enabled double-loop learning which could result in a reframing of officials’ understanding of the issues at hand. Double-loop learning occurred in DEFRA’s SCP team when the social researchers challenged officials’ idea of having a single communications campaign for all audiences. Likewise, in DECC social researchers questioned colleagues’ conceptions of citizens in the Green Deal, smart meters and heat strategy teams. These chapters revealed that in both departments far-reaching forms of influence were made possible through social researchers’ effective use of challenge – which itself was aided by social researchers building a strong rapport with their colleagues. But we also saw that while in DEFRA’s SCP team there has been a discernible (albeit gradual) change in the policy framing since social researchers have been involved, this has not yet occurred in any of the energy efficiency teams

considered in DECC (which admittedly had a shorter history). Nonetheless, any new pay as you save scheme will be better informed by social research evidence from the outset.

The same chapters revealed possible examples of dormant seeds,<sup>14</sup> where research insights did not achieve immediate influence, but which may be revisited under more conducive conditions – for instance when policy teams start developing new policy designs. DEFRA's SCP team's idea to commission a segmentation model three years after Andrew Darnton's recommendation was a clear example. And in both DEFRA and DECC, the lessons of practice theory may yet be translated into novel policy designs. This seems more likely to happen at a time when a new policy window emerges and politicians are open to new policy ideas again.

Aside from instrumental uses of research, there emerged a few clear instances of symbolic uses of social research in both, DEFRA and DECC. DEFRA's SCP team used the *Public Understanding of Sustainable Food* study to substantiate a decision to covertly promote meat-free diets to citizens, while a few of DECC's research projects on citizens' attitudes and engagement with smart meters were used to do nothing more than substantiate support for the policy team's actions. In both cases, it would have been more prudent if the research projects were commissioned earlier in policy development so that the findings could inform decisions during the policy design stage. This would have been unlikely in the departments at those particular times however, since social researchers joined the policy teams quite late in the policy-making processes in these areas.

<sup>14</sup> Owens, 2015, p.132.

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In addition, we saw that DEFRA’s Centre of Expertise on Influencing Behaviour (CEIB) used the discourse of practice theory in a legitimising way, when they saw that criticism was challenging their credibility. While no evidence was found of social research playing a legitimising role in DECC, we must be cautious of drawing conclusions from this – absence of evidence does not equate to evidence of absence. Further research will illuminate whether social research is used in a legitimising sense in the energy and climate change policy teams in future.

Among these many similarities, there is an important difference between the influence of social research in DEFRA’s SCP team and in DECC’s work on energy use. Despite using similar forms of research – segmentation models and qualitative research on citizens’ perspectives – DEFRA’s social researchers were able to move beyond an ‘end-of-pipe’<sup>15</sup> model of research use in SCP policy, and even instil a sense of institutional reflexivity<sup>16</sup> by ‘starting where people are at’ – particularly through the action-based research projects (ABRPs). In DECC, however, I found no evidence of social research being used as the basis for more informed (and less scientific or technologically determinist) policy ideas. Although, as mentioned above, it is the case that social researchers have a shorter history in DECC, and there is some evidence that the energy and climate change teams are now better prepared for using social research early in the policy-making process than in 2010.

In summary then, the comparisons drawn in this section and the previous one have emphasised that on the whole, social research capacity and influence within DEFRA and DECC developed along broadly similar

<sup>15</sup> Lowe et al., 2008, p.230.

<sup>16</sup> Wynne, 1993.

trajectories, with some clear differences due to the distinctive institutional, political, and epistemic contexts of the time. DEFRA's social researchers have progressed further in terms of influencing policy-making processes at an early stage. But in contrast DECC's social researchers have achieved wider reach across their department, ensuring that every policy team has worked with social researchers in some way. So while more could be done to place social research at the core of policy-making processes in energy and climate change in future, DEFRA could also improve its engagement with social research by achieving broader engagement across the department, particularly with teams which have never worked with social research before.

Having compared social researchers' capacity and influence in DEFRA and DECC, the next section revisits the research questions and draws some conclusions from the history of social research in the two departments.

#### **4. Analytical Conclusions: Epistemic Dynamism and Diversity in DEFRA and DECC**

This thesis set out to explore the experiences of social researchers within DEFRA and DECC by answering the following research questions:

Research Question 1: *How has DEFRA's internal capacity for utilising social research changed since it was formed in 2001?*

Research Question 2: *How has DECC's internal capacity for utilising social research changed since it was formed in 2008?*

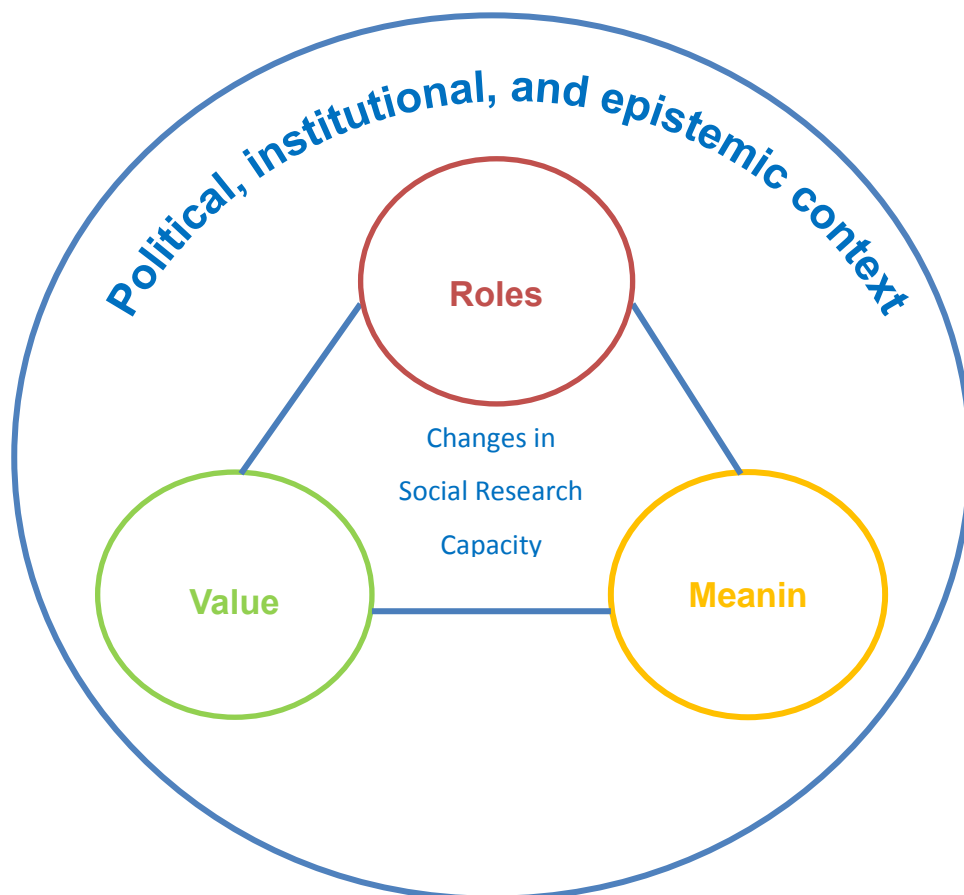
*“Challenge and Be Challenged”*

*Research Question 3: How have social researchers influenced work on specific policy areas in DEFRA?*

*Research Question 4: How have social researchers influenced work on specific policy areas in DECC?*

In this section, I summarise how these research questions were addressed in this thesis. In doing so, I emphasise the epistemically dynamic and diverse nature of DEFRA and DECC, as was revealed throughout the empirical chapters.

I answered the first pair of questions by applying the first part of the theoretical framework presented in Chapter 3 (summarised in Figure 1, which is reproduced below).



**Figure 9: A Graphical Illustration of the Theoretical Framework for Understanding Changes in Social Research Capacity in Policy Institutions**

This framework provided the tools to explore how social research capacity grew in DEFRA and DECC, by focusing our attention on the processes by which new interpretations of the meanings, roles, and value of social research took hold within DEFRA and DECC – as conditioned by the institutional, political, and epistemic context. It emerged in Chapters 4 & 5 that the provision of evidence-based *challenge* is an important mechanism by which civil servants came to learn about social research. By elucidating and disputing officials' perceptions of what social research is, what roles researchers can play in their department, and why researchers' contributions should be valued, insiders and outsiders convinced key officials of the need to develop social research capacity. They thereby contributed to reshaping the epistemic context within the department. It seems unlikely that social researchers would have come to populate these departments if key arguments had not occurred – such as the academic rural researcher's challenges to economists and scientists in DEFRA, and the Head of Science's exchanges with senior officials in DECC to persuade them to value social research. There are more recent examples of such disputes too – in both departments, senior social researchers have challenged colleagues on evidence and research committees to consider the role that different types of social research can play within their projects. Challenge, then, is an important mechanism by which social research capacity has grown in these departments.

The fact that epistemic exchanges take place that can result in policy-makers acquiring new perspectives on the meanings, roles, and value of social research suggests that DEFRA and DECC can be described as 'epistemically dynamic' institutions. That is to say that policy-makers' epistemic perspectives are continuously in flux within these departments, enabling



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actors to learn about social research in a way which has been conducive to the growth in social research capacity.

We also observed such epistemic dynamism *within* specific policy domains. In DEFRA’s SCP team and in DECC’s work on citizens’ energy use, social researchers have continuously challenged colleagues’ assumptions about citizens. This gave rise to innovative new research projects such as studies of citizens’ attitudes towards a variety of sustainable behaviours, and ABRPs. In DECC social researchers’ challenge enabled projects to gain a deeper analysis of the Green Deal’s likely customers, and an empirical study of smart meter users *in situ*. In these ways, social researchers’ interactions within policy areas have contributed towards making DEFRA and DECC more epistemically dynamic. The view of civil servants as averse to criticism<sup>17</sup> appears inaccurate in the light of this evidence. Rather, under supportive circumstances, evidence-based challenge can thrive within government departments.

It follows that there are no ‘natural limits’ to the ways that social research expertise can contribute to energy, environment, and food policy-making processes. Understanding rural communities, consumers’ behaviours and public attitudes have all been portrayed as more ‘natural’ areas for social research than other technical policy areas. Yet, as we have seen, social research is endowed with new meanings and roles over time. It is the challenging of conventional views within DEFRA and DECC that have enabled this to happen.

Clearly reflexivity has not become “a natural or easy condition within policy institutions”.<sup>18</sup> And rather than taking for granted Gibbons et al.’s

<sup>17</sup> c.f. Norris, 1995, p.274.

<sup>18</sup> Wynne, 2007, p.491.

claims that by their very nature ‘mode 2’ organisations are more likely to produce research that is more transdisciplinary, heterogeneous, and reflexive than academic organisations, and the quality of that work is not assessed by peer review but by the effectiveness of the output, we should instead expect to find variability and change within such organisations – with different actors valuing and assessing research differently within the same organisation, and changes being heavily dependent on the conditions in which the officials operate.

It is not, then, any essential features of social science or of the departments themselves but rather contingent contextual changes that shapes how social research capacity develops in these departments. The two-part theoretical framework used in this thesis was valuable for illuminating the political, institutional, and epistemic context within DEFRA and DECC. One key way in which context has shaped social researchers’ capacity and influence is through its impact on the conditions which made challenge possible. It is noteworthy, for instance, that efforts to expand social research capacity in DEFRA and DECC have always relied upon support from actors who were not social researchers – because the former possessed greater authority among senior civil servants. This was clearly the case when the Deputy Director of Science and the Chief Economist in DEFRA created the post of Chief Social Scientist, and likewise in DECC when the capability reviews team persuaded senior officials to build capacity for social and behavioural expertise. There is historical precedent here, since over the years experts in the civil service have often drawn on influential authoritative figures to persuade senior officials to invest in their research.<sup>19</sup> To paraphrase

<sup>19</sup> Gummett, 1980.

Gummett, it appears that social scientists “have become more numerous and more significant..., but they remain ‘on tap, not on top’”.<sup>20</sup>

The effective provision of evidence-based challenge was also predicated upon social researchers considering this as a core aspect of their professional role – we saw that many interviewees described their ‘challenge function’ as a healthy and important means by which they contribute, and they expect to receive constructive challenge too. Noting the presence of disagreements within the civil service is not a new finding – while STS analysts have paid little attention to civil servants’ epistemic interactions within UK Government agencies, the historical accounts reviewed in Chapter 3 have suggested that such disagreements are commonplace.<sup>21</sup> What *is* novel, however, is the observation that government analysts’ provision of challenge function has been institutionally recognised as an important contribution, such that an individual analyst’s experience of providing challenge is used as a measure of their competencies and is taken into consideration when assessed for promotion.<sup>22</sup> They are thus institutionally held to account for their provision of challenge.

However, incentivising individuals to provide challenge in this way is not sufficient for ensuring that analysts provide an effective challenge function. Researchers in DEFRA and DECC emphasised that the ‘capacity to challenge’ relies upon analysts possessing topical knowledge about the social dimensions of a particular policy area. The civil service convention of

<sup>20</sup> Gummett, 1980, p.69. The point that scientists remain on tap and not on top in the civil service has been repeated more recently by civil servants, see Government Office for Science, 2013, p.20.

<sup>21</sup> Clarke, 2007; Gorsky, 2007; Gummett, 1980; Sheard, 2010.

<sup>22</sup> For an example of the Competency Framework used to evaluate social researchers see GSR Unit, 2013. For an example of the same framework for economists see Government Economic Service, 2007.

valuing analysts' skills and experience above topic-specific knowledge gives rise to a situation where there is high staff turnover of researchers (within and between departments). As a result, social researchers may come with no prior experience of using social science in technical policy areas, and this has thus posed a barrier in the exercise of effective challenge in DEFRA and DECC.

The convention does have merits. In contrast to the 1970s when scientists were recruited for their specialist knowledge and found they were unable to progress through the ranks of the civil service,<sup>23</sup> government analysts can now do so by gaining experience in new policy areas and on different projects. As discussed above, this is significant in an environment where in-post promotion is rare and deemed difficult to justify.

Yet, expert knowledge on a particular issue can be lost when one researcher is replaced by another – we saw this, for example, with social researchers in DEFRA's CEIB, or when new researchers are placed in policy teams and expected to provide a challenge function without prior familiarity with the policy domain. As we saw in Chapter 5, DECC's Head of Customer Insight was able to remedy social researchers' lack of specialist knowledge (e.g. on behaviour change and public engagement) by providing new recruits with training material based on the knowledge she had gained prior to joining the civil service. Prior to this, social researchers lacked the theoretical basis to challenge colleagues.

Indeed it seems that in all cases where social researchers have performed a challenge function within policy areas resulting in double-loop learning, this has always involved knowledge-based support from other actors – such as

<sup>23</sup> Gummett, 1980, p.76.

### *“Challenge and Be Challenged”*

the Social Science Expert Panel (e.g. in supporting DEFRA officials to think about the public reaction to a chalara outbreak, and DECC officials to consider the situated nature of opposition to wind farms). Likewise, in DEFRA’s work on SCP policy, we saw that challenges from Tim Jackson and Laura Michaelis, Andrew Darnton, and the team’s first social researcher were all predicated on expertise gained in research environments outside of government. An effective internal challenge function therefore seems to depend upon externally supplied knowledge.

Given this, the lack of social science representation in the influential science advisory committees of these departments is concerning, as their absence means that an important potential source of challenge is not being mobilised. Stronger engagement with research communities would help to ensure social researchers are well equipped to provide a challenge function, as would the creation of a government-wide Chief Social Scientist to overlook all departments’ capacity for social science engagement.

Reflecting further upon the performance of challenge, we have seen that it is predicated upon other factors too. These include social researchers’ status within the organisational and epistemic hierarchy (such that the more senior they are the more influence they can achieve), politicians’ stated views of the value and credibility of social science, the rapport that is established between analysts and generalists – which in turn depends on the analysts’ location within the building, the timing of their engagement within the policy process, and the autonomy they enjoy over their resources. This all suggests that if government analysts’ challenge function is to be nurtured, then more institutional structures are required over and above the assessment of individual analysts. Such support could include the provision of topic-specific knowledge so that researchers are better equipped to question

assumptions, greater senior civil service representation for social researchers, to ensure that their challenge is recognised and valued across government – and that the case is made at a senior level, and, moreover, generalists working in technical policy domains should be formally required to seek input from social scientists in the same way as they are with lawyers and economists, to combat the persistent problem of social researchers being overlooked until too late in the policy process. Taking these steps would see the emergence of a far stronger challenge function in the civil service than that which can be achieved through focusing on individuals' competencies alone.

To summarise the argument so far then, challenge is clearly an important feature of the epistemic culture within DEFRA and DECC. In favourable conditions, it can enable departments to become more epistemically dynamic, and promote learning about social research, which in turn supports the growth of social research capacity. And while social researchers' challenge function could be strengthened in the ways noted in the preceding paragraphs, we can see that, over the years, the exercise of challenge has gradually enabled these departments to become epistemically diverse – that is to say, they host a variety of epistemic perspectives.

DEFRA and DECC are 'epistemically diverse' in a second sense too – in that social researchers' influence has not been limited to the 'visible, short term'<sup>24</sup> forms of impact which colleagues expected them to provide. Consistent with Owens's observation that sometimes experts gain a degree of autonomy to deliver outputs beyond their briefs, so we have seen a plurality of ways in which social researchers have achieved influence in DEFRA and DECC.<sup>25</sup> For

<sup>24</sup> Owens, 2015, p.127.

<sup>25</sup> Owens, 2015, p.16.

instance, in some cases they have stimulated double-loop learning.<sup>26</sup> Social researchers did this in DEFRA when they developed ABRPs, and likewise in DECC when researchers encouraged the Heat Strategy and Policy team to rethink their understanding of citizens’ engagement with heat energy in the home.

In some cases, these efforts led to clear changes in the framing of problems, in others it remains to be seen whether they constitute a slow change in the framing, dormant seeds, or dogs that never barked.<sup>27</sup> But the fact that such conversations have occurred within DEFRA and DECC is enough in itself to suggest a rethink of the idea that “instrumental rationales *preclude* transformative communicative learning”.<sup>28</sup> Indeed, reflexive learning could be seen as entirely consistent with instrumental objectives to improve outputs and processes, if policy-makers appreciate – as they sometimes do – that such learning can help to better achieve their broader (occasionally reinterpreted) objectives.

Again, the diversity in the forms of influence that social researchers could achieve is to a large extent explained by the conditions in which the policy-makers operate. In situations where a policy area is treated as a ministerial priority and is well resourced, where social researchers’ expertise is appreciated and engaged with early in the policy process, where capacity is able to expand, and when social researchers’ epistemic paradigms are represented as consistent with broad policy priorities, then there is good potential for social research to be used effectively in an instrumental way. Such conditions are conducive to immediate, direct impacts within policy

<sup>26</sup> Argyris and Schön, 1978, pp.18-26.

<sup>27</sup> Owens, 2015, p.125-145.

<sup>28</sup> Pallett and Chilvers, 2013, p.1171. [My emphasis].

framings but also to the gradual changing of policy framings. However, when some of these conditions are not met, it is more likely that officials – including social researchers – will use expertise symbolically to support government actions.

All that remains in this section is to make explicit the implicit claim that is being made here about the value of social researchers' contributions in DEFRA and DECC. In a context where public spending is in decline and when government is tasked with confronting wide-ranging technical challenges such as climate change, environmental protection, threats to energy supply, and food risks, this thesis invites reflection on whether academic social scientists should welcome the emergence of social researchers in DEFRA and DECC as a positive step. This thesis cannot and should not claim to answer that question definitively. Social research clearly means different things in different contexts and its meanings are subject to change – as are its roles, the reasons that it is valued, and the influence that it can achieve. In the light of this, throughout this thesis I have adopted a neutral tone, preferring to give voice to actors' perspectives than to make normative claims about them. But having considered the evidence presented in this thesis, the following reflections are offered to the reader.

There is nothing intrinsically 'normatively' democratic about the inclusion of social researchers in DEFRA and DECC, in the sense of empowering citizens to contribute directly to policy-making processes.<sup>29</sup> Occasionally social researchers are able to conduct public dialogues, and sometimes these influence decision-making processes.<sup>30</sup> But since there is currently no formal requirement that generalists seek out social researchers' expertise, the latter

<sup>29</sup> Brown, 2015, p.9.

<sup>30</sup> E.g. for the siting of geological disposal facilities – see Icarus, 2015.



are reliant upon their colleagues valuing public engagement and openness. Moreover, social research has often been used to influence citizens' behaviours without their direct say – sometimes for reasons unbeknownst to them (as we saw in the case of promoting meat-free meals). Therefore, social researchers cannot be understood as ‘democratising’ these technical policy domains if democratisation is interpreted as *directly* affording citizens greater influence over policy decisions.<sup>31</sup>

However, another means of democratisation is achieved through giving voice to a plurality of perspectives.<sup>32</sup> It is in this sense that social researchers could be said to be democratising policy-making in the domains of energy, environment, and food policy. Their engagement in such policy areas enables the “opening up of plural understandings”,<sup>33</sup> and thereby broadens the array of options available for consideration. In this sense, the epistemic diversity within institutions not only affords stronger evidence but also the democratisation of policy-making processes.

## **5. Social Science in Whitehall and Beyond: Limitations and Opportunities for Further Research**

One significant limitation of the research presented here is that I was not able to interview all of the actors involved. Practically this would have taken the project beyond the scope of a PhD. Nonetheless, there were some key actors who were unfortunately unable to participate in this study – some who were involved in the early DEFRA years, others who were involved in the construction of DECC, members of the Cabinet Office's Behavioural

<sup>31</sup> Brown, 2015, p.9.

<sup>32</sup> Brown, 2015, p.17.

<sup>33</sup> Stirling, 2008, p.285.

Insight Team, officials who worked on specific policy areas (such as social exclusion), and other people who contributed to developing and utilising social research capacity in DEFRA and DECC. This issue was somewhat countered by feedback from interview respondents and from other civil servants in DEFRA and DECC who helped to identify gaps and shortcomings. Any remaining errors and omissions are my own.

The scope of the study was necessarily limited. To understand the use of social research expertise in the UK Government's work on energy, environment, and food policy, I focused on two government departments, most notably excluding the Department of Trade and Industry, which is where the policy teams working on energy in DECC had come from. While there were no social researchers in the Department of Trade and Industry (DTI) at the time of DECC's creation, external social science expertise was sometimes utilised, and this could be accounted for. The epistemic context in that department is of even greater interest now that DECC's policy teams have been amalgamated with the former DTI teams to form the new Department for Business, Energy and Industrial Strategy.<sup>34</sup> As the UK prepares to leave the European Union while government departments are going through an unprecedented period of austerity,<sup>35</sup> all amidst a seemingly supportive context of civil service reform,<sup>36</sup> it will be fruitful to explore whether (and how) social researchers can make tangible contributions towards reflexive policy designs in DEFRA and the new DBEIS.

Considering social research expertise in other departments – such as the Department for Transport – would also be relevant, as would other

<sup>34</sup> BBC News, 2016.

<sup>35</sup> Institute for Government, 2015, p.4.

<sup>36</sup> HM Government, 2012.

administrations – for instance the UK’s devolved administrations or other countries in the European Union. Sweden in particular may be an appropriate comparative case, since its decentralised model of government will contrast with that of the UK.<sup>37</sup> Furthermore, a study in 1970 suggested that, like in the UK, pay structures favoured generalists in the Swedish civil service ahead of specialists, while at the same time the importance of social scientists in government was “rapidly growing”.<sup>38</sup> It would be very interesting to find out what social research means to energy, environment, and food policy officials in such contexts. There are thus plenty of opportunities for further research on social researchers within governments.

A second limitation of this project is that the empirical chapters on the use of social research in policy development focused predominantly on interactions between social researchers and policy-makers. While this framing was fruitful, other means by which social science entered DEFRA and DECC were only discussed insofar as they related to social researchers’ work. This may explain why we have seen little evidence of the sociotechnical transitions literature – it is likely that researchers engage with other actors, such as scientists, engineers, and economists rather than social researchers. Or else, it may be that such work has entered policy discourses through an enlightenment model of influence.<sup>39</sup> As such, there remains more to be uncovered in terms of the contributions of social science in DEFRA and DECC.

Moving beyond the role of social science in government, other questions also follow from this study. Scientists, engineers, statisticians, economists

<sup>37</sup> The Swedish Institute, 2016.

<sup>38</sup> Elder, 1970, pp.106-107.

<sup>39</sup> Weiss, 1979.

and social researchers are expected to work together and provide challenge to each other (and to other colleagues) in a department. Yet, the Government Office for Science recently reported that government scientists are often deterred from challenging colleagues.<sup>40</sup> It will therefore be particularly illuminating to conduct case studies around analysts' collaborations within set areas where we might expect challenge to occur. For instance, Dieter Helm accused DECC's economic analysts of naivety for expecting oil prices to continue to rise (which has implications for energy generation policies),<sup>41</sup> while in a recent analysis of UK newspaper articles DEFRA's scientists were portrayed as wedded to the support of badger culling in contrast to academic scientists who, on the whole, were found to construct proportionally more arguments against culling.<sup>42</sup> Neither Helm nor Lodge and Matus interviewed analysts within government to understand those analysts' experiences. The epistemic dynamics deserve to be examined in greater detail, and provide a third set of problems for further research.

## 6. Closing Remarks

I close this thesis with two normative considerations for social scientists concerned with pursuing research impact on policy processes in the future. First, under conducive political and epistemic circumstances, and with appropriate institutional support, social researchers can – and do – make important contributions to the utilisation of social science within technical environment, food, and energy policy remits. The idea of social science as the

<sup>40</sup> Government Office for Science, 2013.

<sup>41</sup> Helm, 2011, p.85.

<sup>42</sup> Lodge and Matus, 2014, p.375.

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‘missing masses’ in these policy domains now seems a far cry from the experiences of policy-makers in these domains.

Second, researchers who argue for socially robust policy processes should welcome and encourage epistemic debate (and particularly the challenge function) within government departments. Social researchers and other actors within the civil service are open to insights and challenge, and collaborating with them could promote institutional reflexivity.

This PhD has thus contributed novel and utilisable empirical and theoretical insights for those interested in UK policy-making processes for energy, environment, and food – and/or expert advice for government in general. Recent institutional, political, and epistemic changes in the UK (particularly the recent closure of the Department of Energy and Climate Change) provide opportunities and threats to social research capacity and to its utilisation in policy design and delivery in technical policy domains. Our attention should now turn to consider how these play out in practice in the coming months and years.

## Appendix 1: Example of Pre-Interview Correspondence

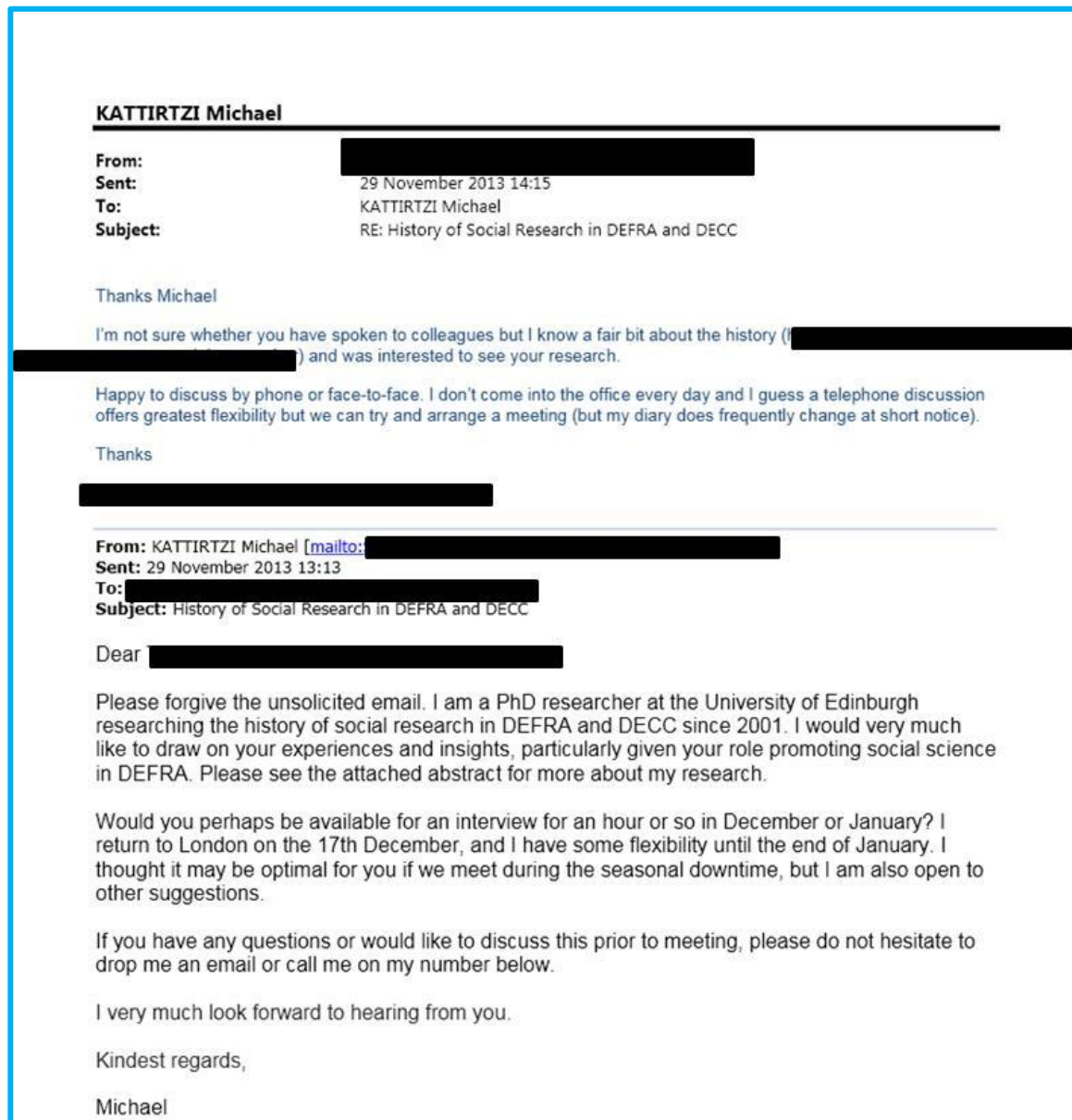




Figure A1-1: Example of an Email-Exchange Between the Researcher and a Prospective Interviewee

## Appendix 2: Example of a Consent Form for Interviews



**E·S·R·C**  
ECONOMIC & SOCIAL  
RESEARCH  
COUNCIL



**UNIVERSITY OF EDINBURGH**

### CONSENT FORM

**Title of Project:** A History of Social Research in DEFRA and DECC

1. I confirm that I have understood the aims of the interview and have had the opportunity to ask questions. ☐

2. I agree to being interviewed, and to the interview being audio recorded. ☐

3. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason. ☐

4. I give permission to the researcher to share the data I provide with the researcher's supervisors - Steven Yearley, Jane Calvert and Sarah Parry. ☐

5. Please choose **one** of the following two options:  
 I would like my real name used in the above (4). ☐  
 I would **not** like my real name to be used in the above (4). ☐

6. I give permission to the researcher to quote my words in future publications, reports and other research outputs. ☐

7. Please choose **one** of the following two options:  
 I would like my real name used in the above (6). ☐  
 I would **not** like my real name to be used in the above (6). ☐

**Please tick box**

Name of Participant: \_\_\_\_\_ Date: \_\_\_\_\_ Signature: \_\_\_\_\_

Researcher: \_\_\_\_\_ Date: \_\_\_\_\_ Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Email: \_\_\_\_\_

Address (home or work): \_\_\_\_\_

Tel: \_\_\_\_\_

**Project contact details for further information:** Michael Katirji  
 School of Technology and Innovation Studies  
 University of Edinburgh  
 Old Surgeons' Hall High School Yards  
 Edinburgh, EH1 1LZ  
 Email: M.Katirji@sims.ed.ac.uk

Figure A2-1: Example of a Consent Form Signed by All Participants

## Appendix 3: Example of a Topic Guide for Interviews

Michael Kattirtzi		<a href="mailto:M.Kattirtzi@sms.ed.ac.uk">M.Kattirtzi@sms.ed.ac.uk</a>
Topic Guide - Social Researcher		
Question Stage	Question	Background, Prompts or Extra Information
Introduction and niceties	Thank you.	Edinburgh STS, PhD student. History of 'social research' in DEFRA and DECC. Open to ideas for case studies at this stage.
	Ok to record interview?	
	A bit about me.	
	Could you tell me about yourself?	Academic background, interests, current employment? How did you come to be an s.r – in this department? GSR?
Social researcher's history	Can you tell me how you started as a social researcher? ..in this department?	Examples of projects
	Tell me how it was when you started?	colleagues' perspectives, help
	How has it changed?	Who did you work to?
	How did this particular team/organisation/ x come to be formed?	
	What were the reasons?	
Specific work	Tell me about some specific projects you have worked on?	How was buy-in achieved?
		I noticed this report..
	How is social science perceived within different teams?	Evidence and policy teams? Econs and engineers?
GSR and depts/ civil servants	What channels does the department have for receiving social science contributions?	
	Tell me about the GSR. What does it do, does it support you?	
	What is the relationship between GSR and your department like?	
	How have you see the role of SRs change here?	Embedded model? Type of work Contribution valued? Strategic too? *Point to organisational charts!
Relationship with other institutions/ researchers	What role have these played, how has that changed?	ESRC, research orgs/ universities, other institutions?
Barriers	What barriers do you think social sciences have faced? Do you think some have been understood or used better than others?	
	Do social research insights contribute to the long-term learning in the department?	
	What do you think the future looks like for social research in this dept/ government?	Short- and long-term.
Wrap up	Who else do you think I should speak to? Can you introduce me, or can I say you mentioned them?	Perhaps someone using a different approach, or coming from a different perspective? Or even, the same...
	Is there anything you would like to add?	Thank you, I'll be in touch...

Figure A3-1: Example of a Topic Guide for Semi-Structured Interviews with Social Researchers



## Appendix 4: Full-Page Sized Figures

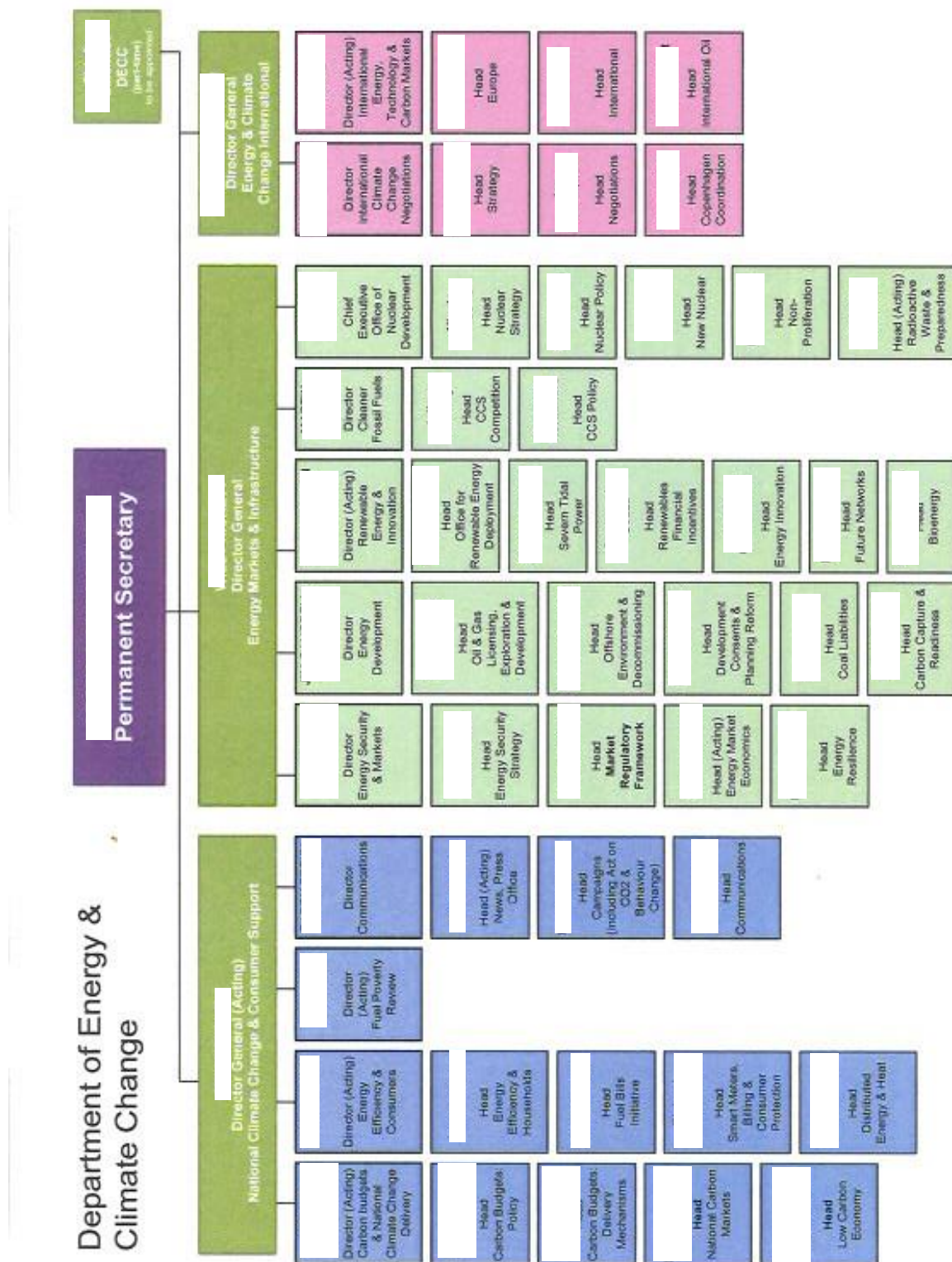
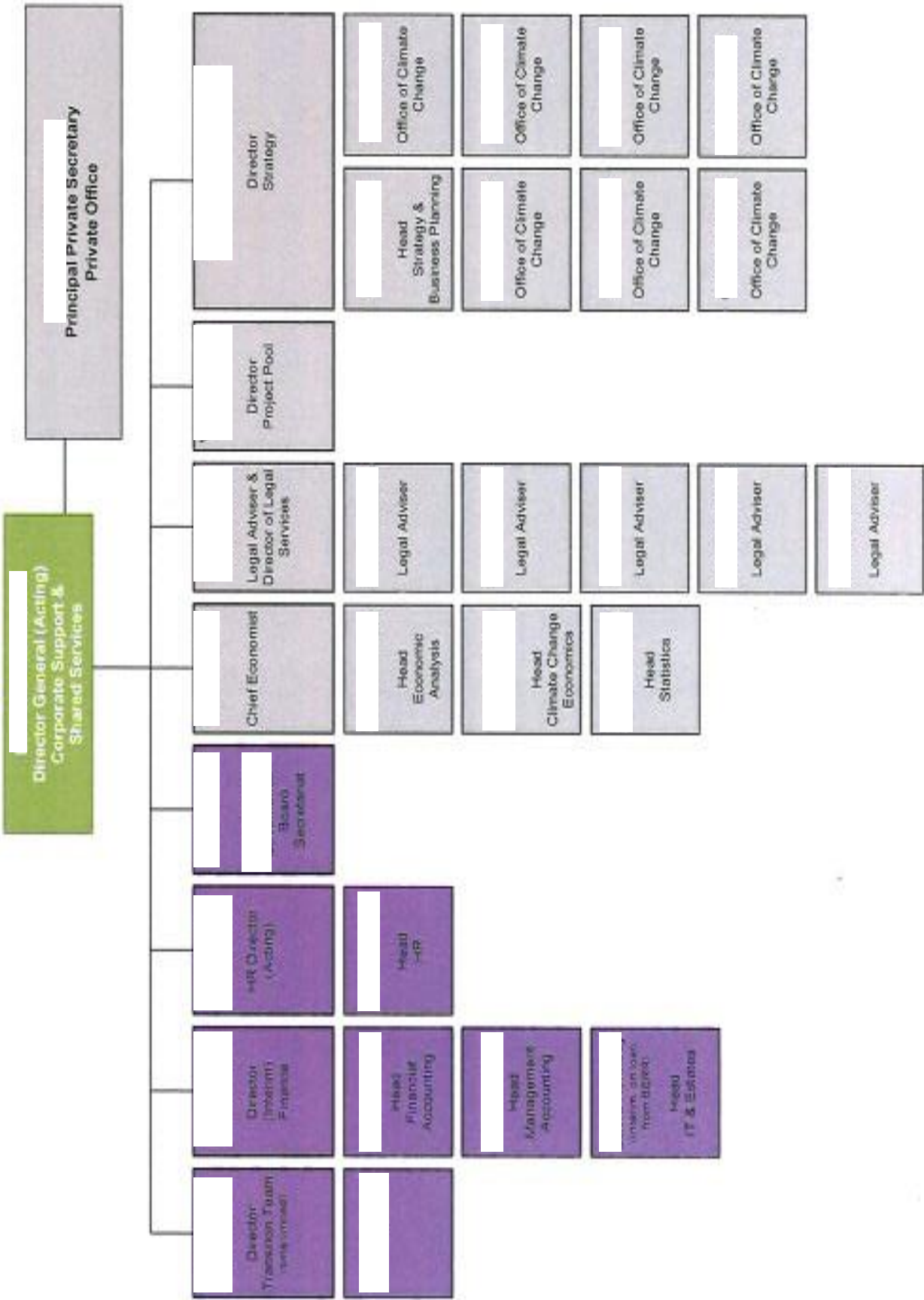


Figure A4-1: An Organisational Chart of DECC Staff Positions, c. September 2009

(DECC, n.d.-b). Figure continues across the next page



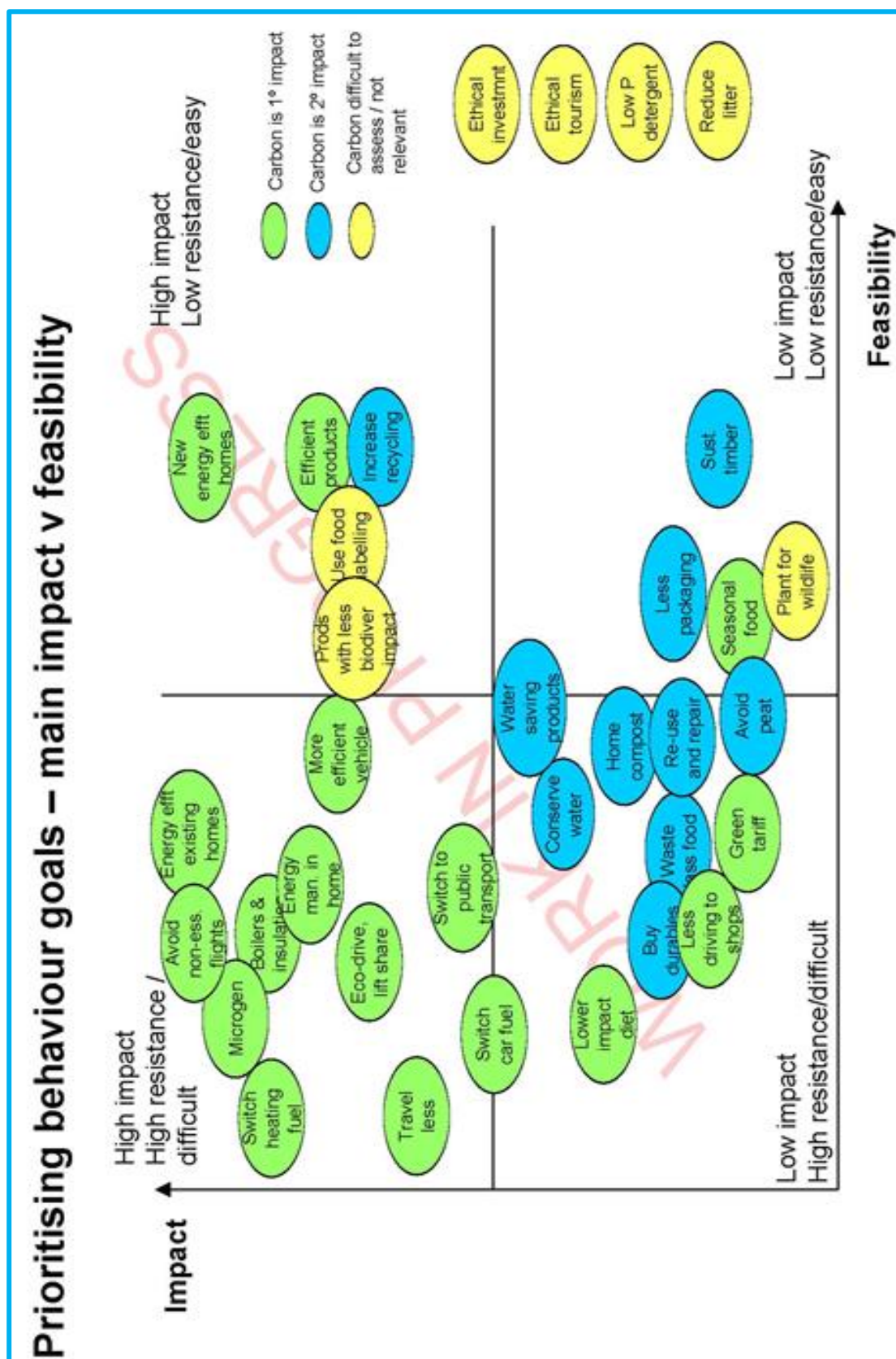


Figure A4-2: A Shortlist of Environmental Behaviours to Promote to Citizens

(Green Alliance, 2006, p.62)



Segment	General Characteristics
Positive Greens (18%)	"I think we need to do some things differently to tackle climate change. I do what I can and I feel bad about the rest"
Waste Watchers (12%)	"Waste not, want not' that's important, you should live life thinking about what you're doing and using"
Concerned Consumers (14%)	"I think I do more than a lot of people. Still, going away is important, I'd find that hard to give up ...well I wouldn't, so carbon offsetting would make me feel better"
Sideline Supporters (14%)	"I think climate change is a big problem for us. I suppose I don't think much about how much water or electricity I use, and I forget to turn things off ...I'd like to do a bit more"
Cautious Participants (14%)	"I do a couple of things to help the environment. I'd really like to do more ...well as long as I saw others were"
Stalled Starters (10%)	"I don't know much about climate change. I can't afford a car so I use public transport ...I'd like a car though"
Honestly Disengaged (18%)	"Maybe there'll be an environmental disaster, maybe not. Makes no difference to me, I'm just living my life the way I want to"

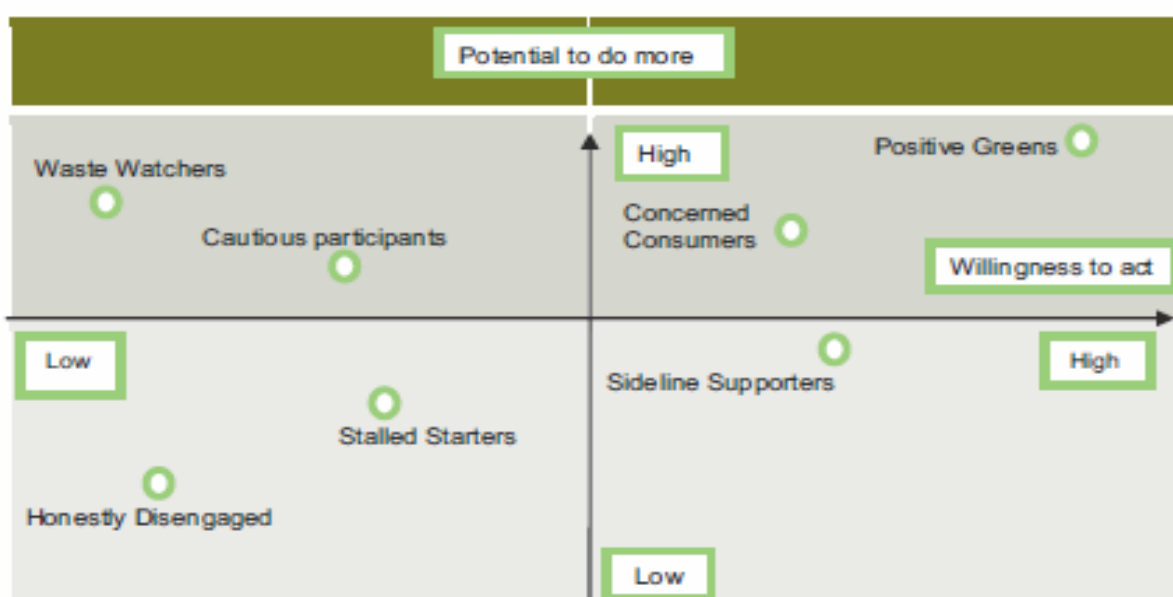


Figure A4-3: DEFRA's Segmentation Model (Eppel et al., 2013, p.38)

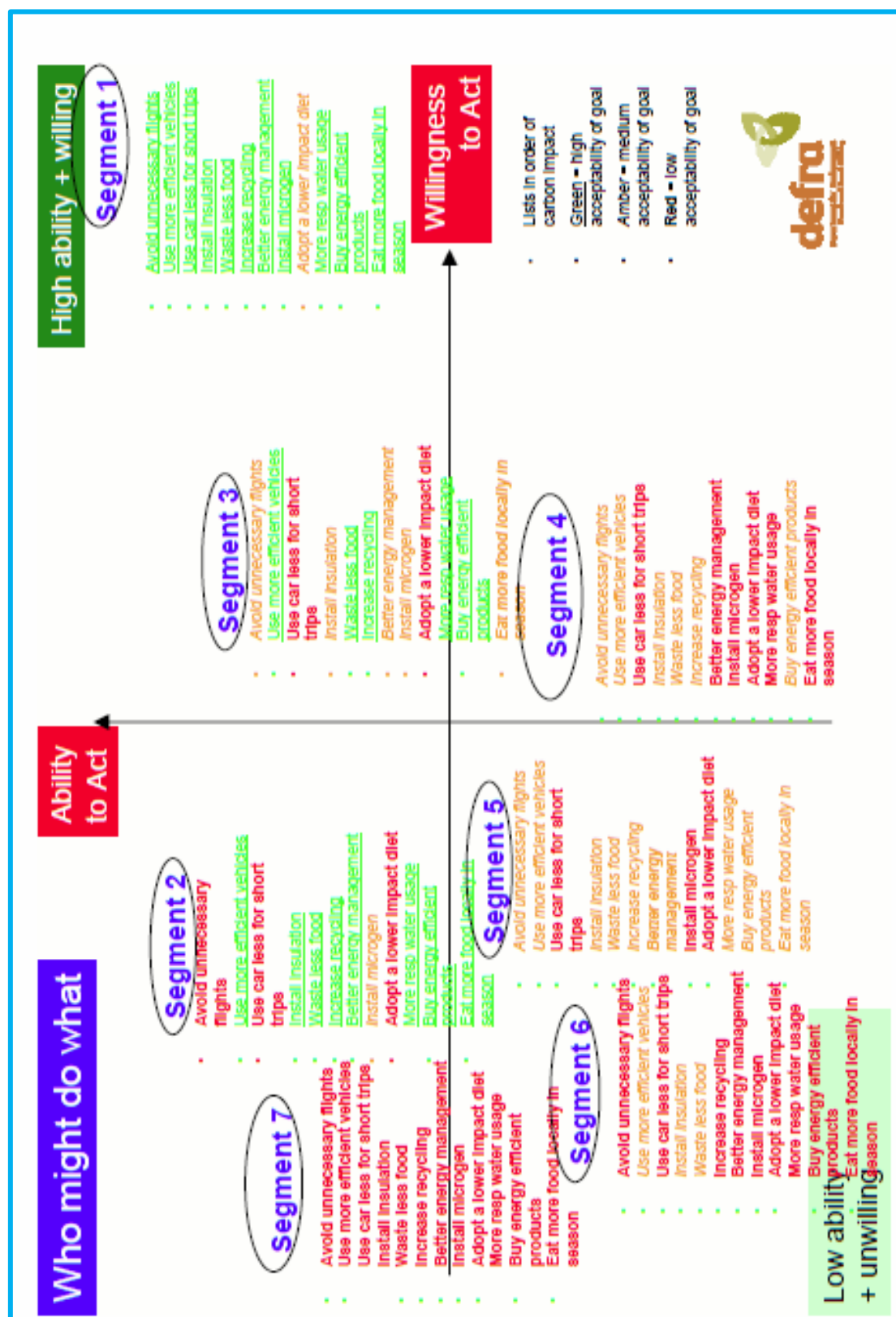


Figure A4-4: Acceptability of the Twelve Behaviours Amongst Different Segments

(DEFRA, 2008a, p.46)

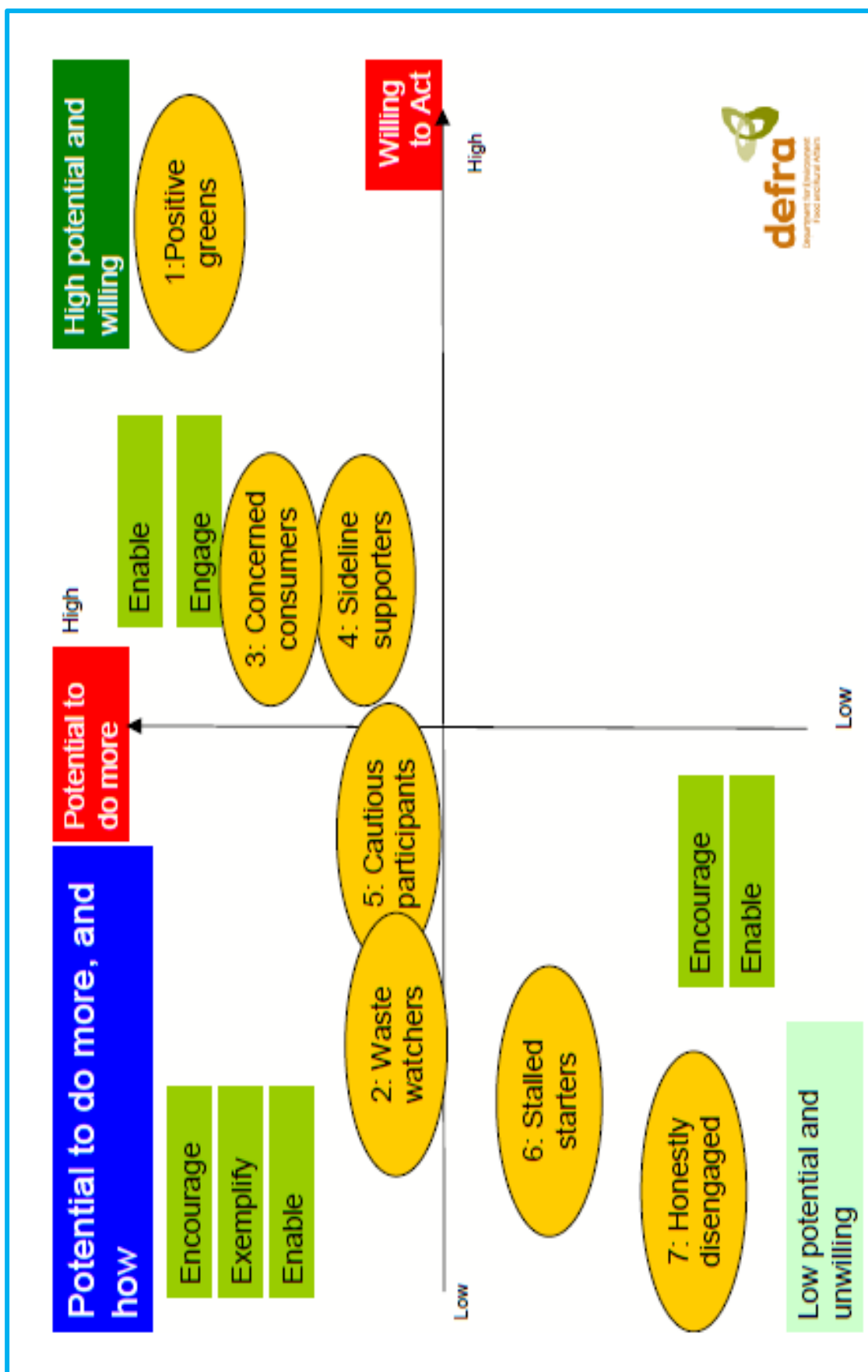


Figure A4-5: DEFRA's Segmentation Model Overlaid with the 4Es Model

(DEFRA, 2008a, p.10)

Headline Behaviours	Key Behaviours	Sub-Behaviours	Centre of Expertise on Influencing Behaviour, Defra
Eco-improving your home (retrofitting)	Insulating your home	Installing loft insulation	Topping up loft insulation
	Upgrading heating & hot water systems	Upgrading boiler	Installing solid wall insulation
	Fitting & using water saving devices	Upgrading to low flush toilet	Installing double glazing
Using energy & water wisely	Generating own energy by installing renewables	Solar / electric	Fixing dripping taps
	Managing temperature	Solar / water	Micro- CHP
	Washing & drying laundry using minimum energy & water	Fitting water efficient shower head	Ground and air source heat pumps
Extending the life of things (to minimise waste)	Maintaining & repairing (instead of replacing)	Using right amount of detergent	
	Giving new life to unwanted items eg furniture	Switching to green energy tariff	
	Making the most of kerbside and local recycling services	Repairing electrical goods	Repairing furniture
Cooking and managing a sustainable & healthier diet	Choosing foods grown in season (in country of origin)	Repairing electrical goods	Repairing clothes
	Increasing proportion of vegetables, fruit, and grains in diet (eating a balanced diet)	Using furniture reuse organisations, or services such as Freecycle, ebay etc	Clothes to charity shops
	Cooking sustainable & healthier food	Recycling textiles & clothes	Registering with Mail Preference Service
Choosing eco-products & services	Wasting less food	Disposing safely of batteries, paint	
	Growing your own food	Planning meals ahead	Storing for quality & safety
	Using labelling to choose most energy & water efficient products	Home composting food waste	
Travelling sustainably	Choosing fairly traded, eco-labelled and independently certified food, clothing etc	Sustainable wood such as FSC wood	Low impact clothes
	Borrowing, hiring or sourcing second-hand or recycled	Choosing 2nd hand furniture	Choosing 2nd hand clothing
	Buying ethically when travelling	Choosing 2nd hand furniture	Choosing 2nd hand clothing
Setting up & using resources in your community	Making the most of cycling, walking, public transport and car sharing for short journeys	Borrowing or hiring electrical goods	Choosing 2nd hand furniture
	When buying or replacing a vehicle, take advantage of lower-emission models available	Sustainable fish such as MSC fish	Low impact clothes
	Making the most of alternatives to travel eg video conf flying, eg trains	Choosing 2nd hand furniture	Choosing 2nd hand clothing
Using & future-proofing outdoor spaces	Driving more efficiently	Combining trips	Using eco-driving techniques
	Setting up car share and using car clubs	Using eco-driving techniques	Maintaining tyre pressure
	Installing community micro-gen	Swapping skills	Finding / using local shops
Being part of improving the environment	Sharing knowledge, skills etc	Creating an environment for wildlife	Using rainwater and a water butt
	Gardening for biodiversity & environment	Using your local green spaces	Home composting garden waste
	Enjoying the outdoors	Volunteering for local conservation project	Joining an environmental / conservation group
	Volunteering (with a local or national group)	Taking part in local planning process	
	Getting involved in local decisions		

Figure A4-6: The Updated Headline Behaviours, 2011 (DEFRA, 2011b, p.13)

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